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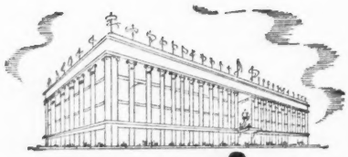

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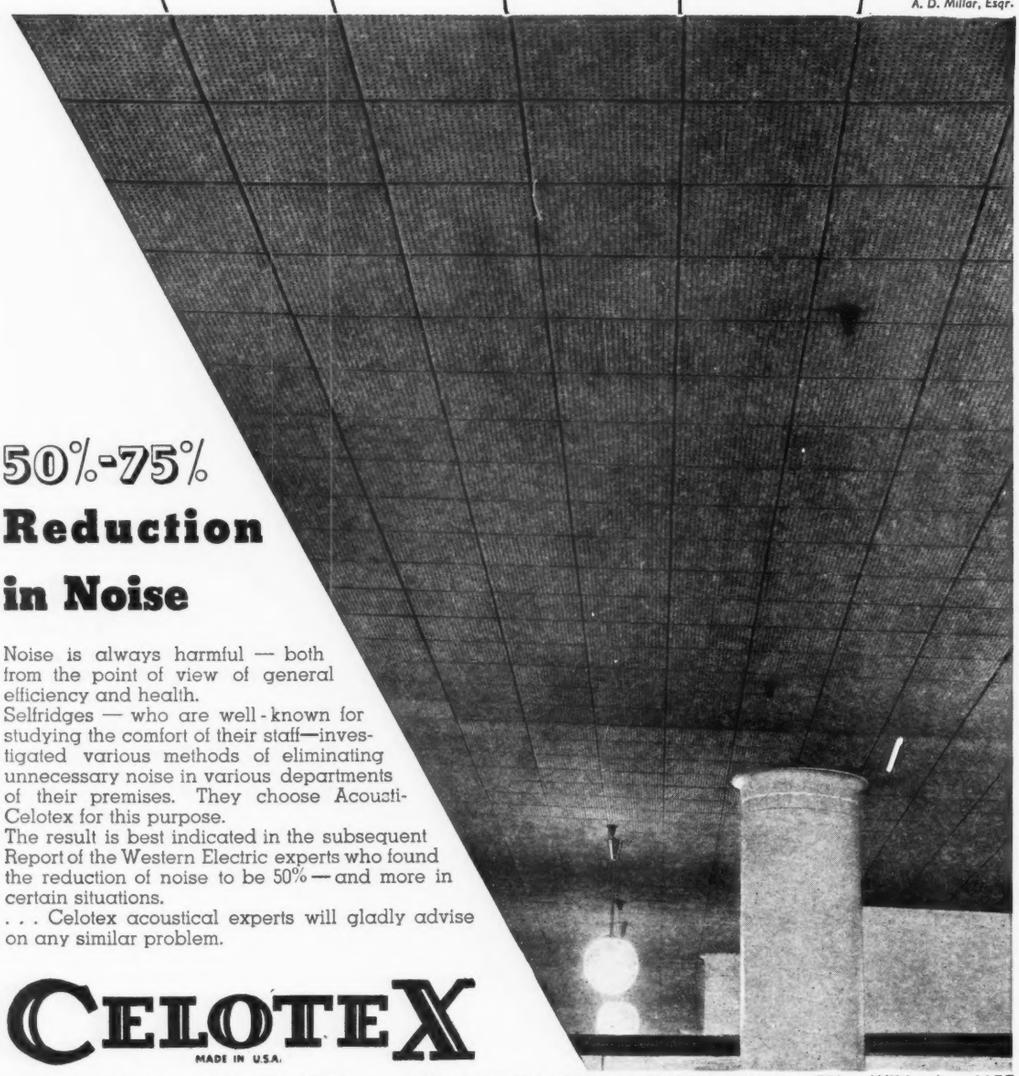

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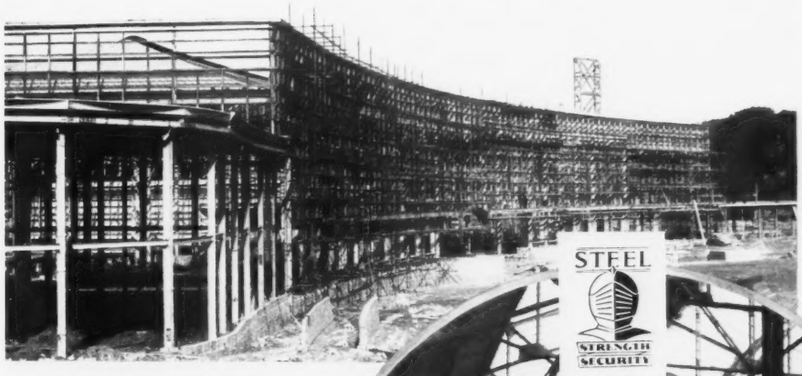

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THE
ARCHITECTURAL REVIEW
A Magazine of Architecture & Decoration

Vol. LXXXIII, No. 498 May 1938

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Prepaid Subscription Rates

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An index is issued every six months, covering the months of January to June and July to December, and can be obtained, without charge, on application to the Publishers, 9 Queen Anne's Gate, Westminster, S.W.1.

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Telephone: 9212-7 Whitehall (6 lines)

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THE HUNGARIAN VILLAGE

Fertöszeplak, Hungary: an illustration of a traditional form of "town-planning" in the Hungarian village, with a row of whitewashed houses flanking the main street overlooked by the church on the hilltop. The narrow sites run obliquely into the main line of the street and the walls of the houses are built parallel with the border of the site, enabling regular oblong interiors to be constructed. This leaves triangular and trapezium shaped portions of the site between the houses and the roadway, which are voluntarily added to the width of the road, and give the zig-zag line so characteristic of this district.

Modern architects have lately found great interest in the study of primitive and traditional vernacular architecture. Vernacular buildings are, for economic and technical reasons, seldom elaborate and have to rely therefore on the perfect consideration of their simple elements. Their perfection is usually one that has been achieved unself-consciously after endless modification, and they offer valuable precedents for the use of elementary architectural forms. In Hungary, a group of modern architects have recently made an extensive study of their country's rich vernacular traditions. This article is contributed by a member of the group and illustrated by a selection from the group's remarkable collection of photographs. The author discusses the general significance of the rural architecture shown as well as the problem of modern design in the same rural setting.

Hungarian Rural Architecture

By J. de Padányi-Gulyás

THE material discussed in this article is not the result of historical research work; nor is it the result of any attempt to unearth ethnological curiosities. It is the work of a group of active architects, all of Budapest, who realized that there are problems that modern architecture still has not solved. During the last twenty years the architecture of towns has gone through great changes; the home of the city-dweller has been made comfortable by means of numerous technical advances, and gradually these improvements have become available to some degree even to the poorest who live in cities. *The villages, however, enjoy none of the advantages of progress.* And the majority of the Hungarian people live in the country, the architecture of which has been entirely neglected by the modern trend. If at times something has been introduced it has had a strange and frigid effect. Whatever the village adopted from the town was mere outer clothing which did not signify much; on the contrary it spoilt the scenery. *Country life is welded with nature and the soil; its architecture, therefore, should be developed on local lines; otherwise its development will not be organic.*

We were prompted by this state of affairs to search for a basis upon which improvement could be made, and began to study our rural architecture. We might have thought that country people had just *houses;* we know now that they have *architecture* as well. We collected some 10,000 photographs from various districts of the country, from which it may be seen that the architecture of the people in many respects is simpler and healthier than the more pretentious town architecture.

Country folk are poor, therefore thrifty. Thus they are not inclined to waste money on useless finery and ornamentation. *The aim of their architecture is primarily to accomplish what is strictly necessary, and it does not intentionally do anything that is unnecessary. They cannot pick and choose their materials to accomplish their aim; they must use what is at hand and what they manufacture themselves.* It follows that most country buildings are of beaten clay or bricks, or, in the vicinity of rocky strata, of stone for walls, with the roof timbered and covered with thatch; very rarely with tiles. *They cannot vary their design arbitrarily,* as there are no craftsmen at hand versed in complicated technique. The solutions are sometimes primitive but strong and lasting nevertheless. They are something which the peasant can build himself. Rural houses are built up with very little help from professional builders. Apart from the work of the carpenter, the locksmith and the glazier, almost everything is done by the farmer, his family and his neighbours and relatives.

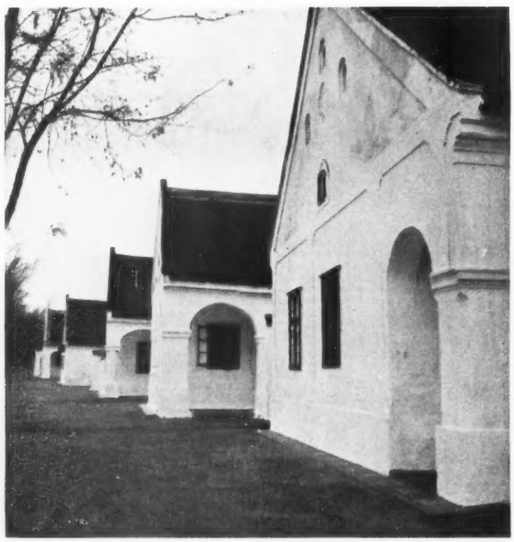
Now, if in spite of modest means and limited technique this rural architecture has developed along lines which we consider to be beautiful, then indeed this beauty is something which we can appreciate from all angles. *As the basis of a lovely form, a characteristic solution, one feels the slow development of centuries of improvement.*

There is not much variety in the country solution; there is not too much change in the characteristic forms: sometimes a whole street of houses, or the houses of a whole village are so much on the same pattern that it seems as though a mighty rationalizing and normalizing committee had laid down a set of rules. What is so difficult for the authorities to achieve when faced with the town people's heterogeneous taste and their inclination towards conspicuous houses, is arrived at by the country people with ease, without having to comply with regulations. In all probability one reason lies in the conservative sense of doing something they are used to: another reason is that in the country they are not versed in complicated design and therefore could not aim at a great variety of architecture. The main reason is, however, the better sense of collectivity. One house does not wish to be bigger than the other. One man does not want something that is conspicuously different from his neighbours. Simple folk live in these houses who have very much in common, and if one of them possesses one or two yokes more land, he does not wish to have it advertised by building higher eaves or fancy façades. The Hungarian village is a social unit and this unity is demonstrated by the whole planning of the village.

This spirit of unity leads to interesting solutions. Would we ever find a site-owner in a town who voluntarily surrendered part of his property for public purposes? Yet the villagers of Fertőszéplak voluntarily gave a small triangular portion of their land to improve the roadway. Their effective zig-zag building line would satisfy the most particular town-planners. Furthermore, the porch-entrances which form the zig-zag line are useful as well as beautiful, providing covered porticoes, into which a window in each house opens, so that through the window the whole length of the street is visible; as can be seen in the facing illustration.

It is true that sometimes the windows in village houses are much too small, but one must realize that country folk do not look for sunshine, light and air in the rooms they inhabit, because from early spring till late autumn they spend their lives out of doors. The master of the house sleeps mostly on the verandah under the eaves, the verandah being a special feature of the Hungarian village house. It is when the weather is already cold, when there is rain and snow outside, that the country people retire into their rooms, and the house simply serves its primitive purpose of sheltering the inmates from the elements.

When looking at the sturdy pillars and the sweeping arches of the village verandahs one thinks of medieval monastery courtyards, and it is our conviction that the Hun-



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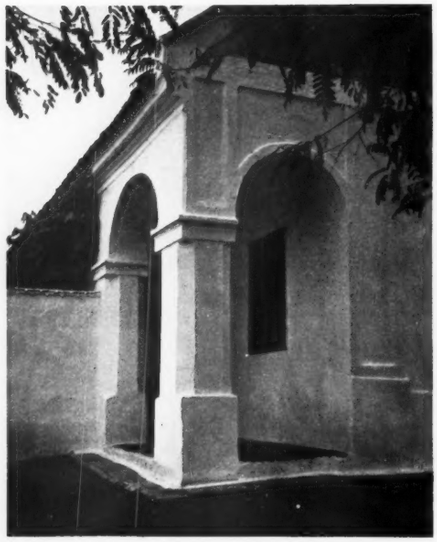

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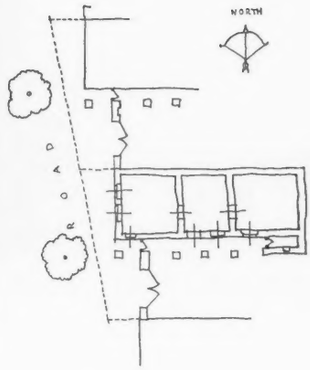

1 and 2, entrance porches to the houses in the main street of Fertőszéplak. Most of the houses have a full-length verandah on the southern side, and the entrance porch is nothing but the end section of the verandah, looking on to the street, as can be seen in the accompanying plan. Often a window is cut into it, giving a view of the whole street from the front room.

garian country folk stand spiritually very near to the architecture of this period; particularly to that which was adopted by the national kings of the House of Árpád in the 11th and 12th century; and it seems as if in the depth of the people's soul they cling to old and accepted forms and do not wish to change their habits. They prefer to reach back over the memories of centuries.

Looking at some of these pillars with modern eyes one would consider them to be out of proportion, but we must not overlook the fact that the majority of these village houses were built of clay and not of solid bricks or concrete. One is bound to put the question: *is it actually necessary to follow the modern trend of using the minimum in size, always and without exception?* Admitted that we can prove with statistical calculation that a given weight can be supported by a pillar of half a brick width: but is it right to use half a brick's width when our eyes call for more? Why are we so distrustful of our eyes, when it is certain that our optical requirements develop along with the broadening of our knowledge. *Rural architecture is generous with the use of material and adds freely to proportion.* Perhaps this derives from nature, to which this architecture is so close. Nature does not cut down its creations to the minimum of size. The trunk of a tree is *somewhat* broader than what is absolutely necessary to support the foliage and withstand stresses. Even the form of fishes and birds are *somewhat* more proportioned than is required by their functioning. And it is this *something* which causes the forms of nature to be so restful. Extreme economy is a human characteristic but it cannot be considered as general. If someone desires something very badly he is not thrifty. This explains the fact that sometimes man is generous to the extreme when manufacturing the instruments of death and destruction; on the other hand he can be exceedingly meticulous when calculating the "minimum of existence" sufficient for the livelihood of himself and his family. We are fond of saying that man is master over matter. He has discovered the mechanism and the components of matter, and possessing this knowledge he is not forced to pile up large quantities of materials to support comparatively small loads, as the Egyptians and Persians had to do. But sometimes this conquest seems to be dubious. It is arguable that man has again become subordinated to his materials, since he began to be so precise in calculating the minimum of material which he intends to use.

In Hungary, as elsewhere, there is one problem that rural building continually presents to the modern architect. Given the existing village—of the traditional design shown in the accompanying illustrations—let us assume that it needs a new council hall, school, co-operative building or cultural centre, or that one or several new dwelling houses are to be built in it. These may be done in such a manner as to ignore

3

3, a house in Csepreg. The massive gate pillars, apparently quite out of proportion to the weight they have to bear, are characteristic of this rural architecture, much of whose effect is derived from the exaggerated sturdiness of its construction.

The decoration of wall surfaces is rare in Hungarian village architecture, whose effects are more often derived from the expressive handling of structure and materials. Where such ornamentation is used, as in the pargeted surface panelling on this house at Sopronkövesd, it is surprisingly refined in quality.

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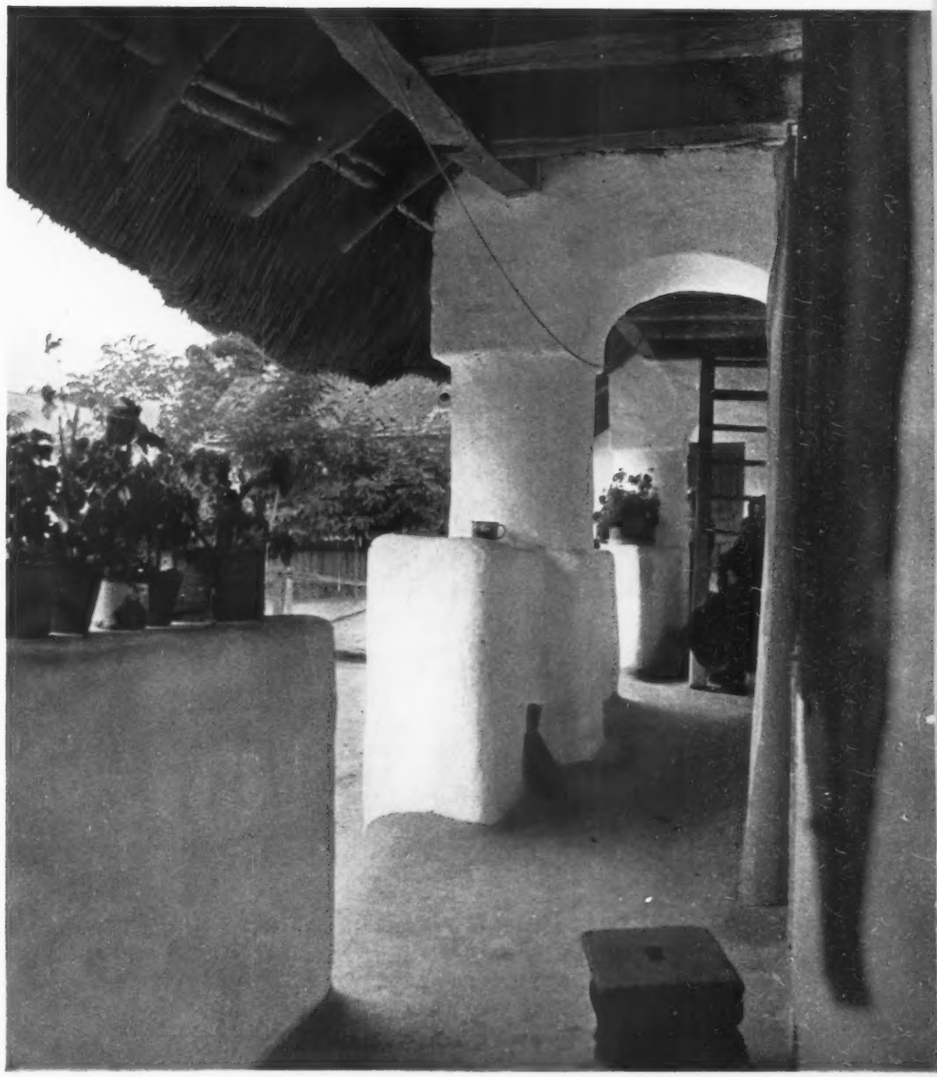

One of the special architectural features resulting from the extremes of heat and cold which characterize the Hungarian climate is the thatched verandah, which provides a shaded sitting place in summer. This example is from the village of Zamárdi.

UNIV. OF MICH.

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4, detail of a gate at Vörosberény: an example of village craftsmanship in wood and iron. 5, an earthenware stove from a house in the same village, a type which is rapidly giving place to the cheap iron stove with its greater efficiency and economy of fuel. The slabs of the dismembered stoves are often found in the farmyards, acting as drinking pans for chickens. 6, the verandah of a house in the Lake Balaton district. 9, an exterior view of the same house. 7, a verandah in Hidgség. A special feature of these village houses which is found in some districts, is the large overhang of the crested eaves which give protection from the sun in summer. 8, an example from Szakony. 10, a small house at Nemestördemicz, shows the verandah in one of its simplest, and architecturally one of its most effective, forms.

quite frankly the existing buildings and consider only the immediate needs of the village as it is today. It is possible that in this case the new buildings would be the most practicable and on the whole the most perfect obtainable, but this solution is obviously not without its faults. The method of concentrating on the building of the new house alone is somewhat obsolete. The modern architect is bound to consider the surroundings of the building he is about to design. The new building will take up a certain position on the site, the utmost utilization of space being one of the most important points; at the same time the exterior of every new building is bound to modify, even to change, the area in which the building is erected, and if the effect is disturbing and restless the solution is not perfect. We find that it is not as a matter of fact necessary for the architect to introduce an entirely foreign element into the village scenery in order to provide the most practical solution. The picture of a village which was created by assimilation into the countryside, by time and by the spirit of the people, is just as valuable in our eyes as the new forms which have often been accepted nonchalantly and carelessly. We are always impressed by the unity of village planning

11

12

13

11–13, *an essay in contemporary design in the Hungarian vernacular idiom: Balatonszéplak, a summer health resort for the children of electric railway employees at Budapest, designed by the author of this article.* 11, *the entrance porches to the houses.* 12, *a general view of the group of buildings.* 13, *an interior. This is finished with brick paving and equipped with deal furniture, left its natural colour.*

and we are now coming to realize *that the traditional elements of rural architecture are not contrary to the spirit of modern ideas; indeed, in many instances some of their solutions are as clear and wholesome as those that modern architects achieve only in their best work.*

It is possibly this realization which prompts architects the world over to study rural architecture nowadays with greater understanding. Surely it is not pure chance that Le Corbusier is enthusiastic about the ancient solutions of primitive rural architecture: that Dutch and Scandinavian architecture continually refreshes itself by the adaptation of rural characteristics and that Professor Pagano is publishing a book on the quite unknown rural architecture of Italy, a country so rich in more sophisticated architectural masterpieces. It is also not mere chance that we Hungarian architects are publishing this year the second volume of our researches into rural architecture, and again it is not chance that all this is happening at a time when the architectural forms of the Modern Movement show some hesitation in progress. Symptoms of an academic stiffness are undoubtedly noticeable, which can perhaps be eradicated by fresh study of the vernacular. There is no reason to fear that with modern design thus revitalized and liberated, architecture will fall a victim to some new reactionary influence. It is no obstacle in the way of progress, and he who would stick to particular forms for the sake of some attractive theory will be overrun by the flow of real life.

Progress makes many new demands on modern architecture. We have provided our buildings with all the wonders of technical development and civilization, but man looks round his new house searching for beauty, warmth and culture; he is not willing to sacrifice one particle of the comforts and practical conveniences which he has acquired; but neither will he exchange the cosy atmosphere of his home for any electrically heated and air-cooled wonders of modern architecture.

If he can find a way to preserve this human vitality through rural architecture, then there is nothing to fear. The architecture of the people, as far as technical development and equipment for comfort are concerned, is sometimes truly poor—but as far as charm and human quality are concerned, it is inexhaustible in wealth.

Finally, *our renewed interest in the architecture of the people will undoubtedly have a favourable effect on village life as well as on ourselves.*

✓

FLATS IN ST. JOHN'S WOOD, LONDON

1

MARSHALL AND TWEEDY ARCHITECTS

2

This block of eighty-four luxury flats in Prince Albert Road, known as Viceroy Court, is built on an island site, formed by the demolition of some spacious late Victorian houses. The neighbouring district is exclusively residential in character, mainly prosperous Edwardian in style, and in general undergoing a gradual transition from house to flat block. The main front, 1, faced with golden brown bricks and cast stone trims, looks out on Nash's Regent's Park, over the sunken Regent's Canal which intervenes. It is planned as an elongated H, a form that avoids internal courts, and provides scope for lawns and a generous drive-in passing under the two "porte-cochères." The frame for its seven storeys is of reinforced concrete, with wide spans and overhangs to the end strokes of the H. The rear façade, 2, shows a cheaper, lighter and smoother-surfaced brick, but has a remarkably more neat and presentable appearance than many rear elevations. An 80-car garage, with filling station, is concealed beneath the rear lawn.

FLATS IN ST. JOHN'S WOOD,

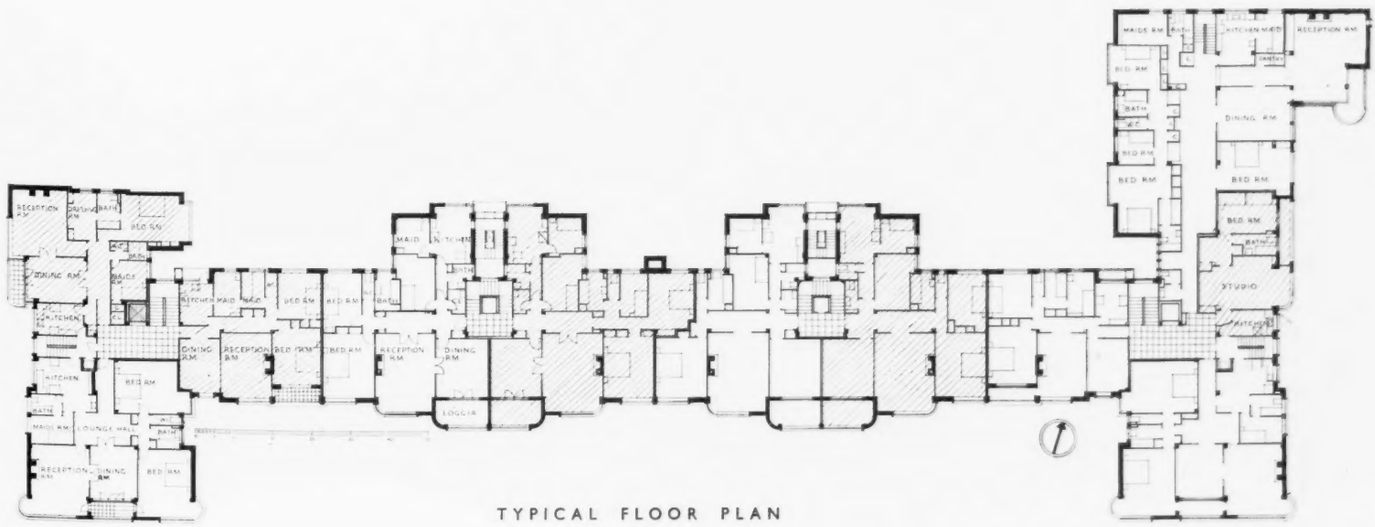
3

O N D O N

4

5

The main front faces south-east. 3, the short return façade to the south-west, with the service stair and adjacent goods lift marked externally by the strong vertical of a glass-concrete window. The photograph shows the rough texture of the facing bricks which contrasts with the smooth white cast-stone trim of the fenestration. The semi-circular windows peering round the angle of the building form alcoves in each main living-room above the ground floor. As indicated by the "residential" lamp-post, the by-road from which this photograph is taken is sufficiently quiet to warrant bringing the building-face out to the pavement, with a minimum of intermediate lawn. 4, one of the two "porte-cochères," in reinforced concrete column and slab construction. The canopy contains large circular lights, interspersed with similar electric lighting features. The concrete is finished to a rough texture, with a biscuit-colour wash, the full-glazed metal doors being painted blue-green. In each of the two main and two subsidiary foyers, 5, from which run self-operated lifts, tape machines are installed. Below is a typical floor plan, showing the range of accommodation from the minimum studio-flat to the largest 5-bedroom flat.



TYPICAL FLOOR PLAN

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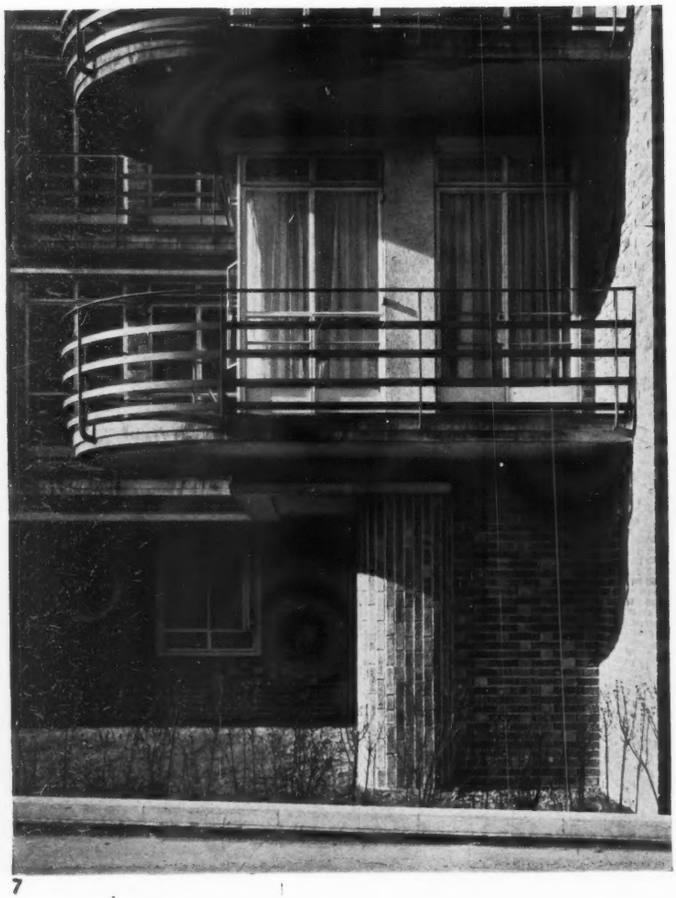

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9

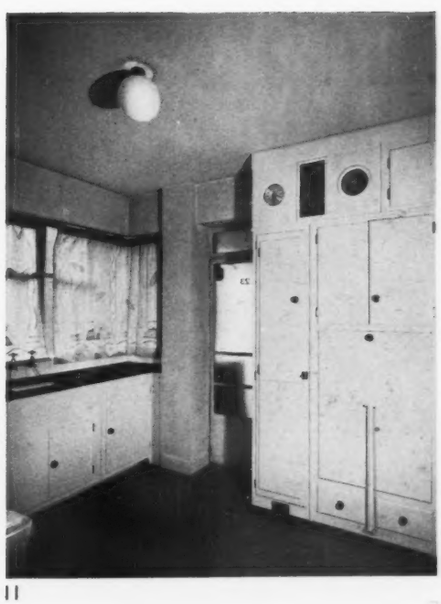
Three interiors of a furnished 5-bedroom flat on the ground floor. 9, looking through from the lounge to the dining-room, across the small vestibule. Reeded glass panels

JOHN'S WOOD, LONDON

12

6, looking down from the roof on to the corner living-room balconies. The window glazing bars are in cream and the metal balcony rails painted blue-green. 7, a detail at the foot of this tier of balconies, showing the use of vertically bonded brickwork on the sharp curve of the pier. Either end of the main façade, 8, breaks forward to catch the sun, and partially to enclose the entrance forecourt. 12, on the roof terrace which is accessible to tenants of all flats and is being planted to form a communal roof-garden. The chimney stacks have concrete canopies to provide shelters.

10



11

glaze each set of double-doors. 10, the lounge-living-room showing the large windows with their outlook across the road into Regent's Park. The room is provided with a coal fire as well as mechanical heating. 11, the kitchen. Metal sink, electric clock and radio, refrigerator, and tradesmen's telephone are all built in. Adjacent is a maid's sitting-room. This 5-bedroom flat is let at approximately £750 per annum, and the studio flat at £150.

FLATS IN ST. JOHN'S WOOD, LONDON

12

TYPICAL TWO-BEDROOM FLAT

13

14

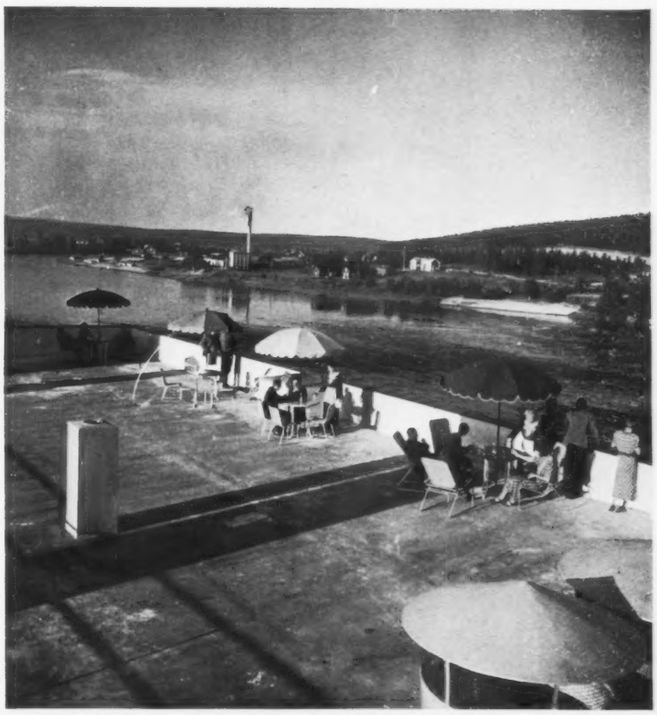
15

16

The architect has furnished his own flat in an extreme top corner of the block. It is of standard 5-bedroom (with maid's room) design, except for such fittings as the wrought-iron gates between the lounge and the entrance vestibule, 14, and some refinements of concealed pelmet lighting, 16. 13, the inner portion of the double sitting-room showing the bay window through the side of which an oblique view of the park can be obtained. 15, the principle bedroom, looking towards the bathroom. 12, the view from the bedroom window across the rear court, looking north-west towards the heights of Hampstead. Above is a detailed plan of the flat.

HOTEL AT ROVANIEMI, LAPLAND

1



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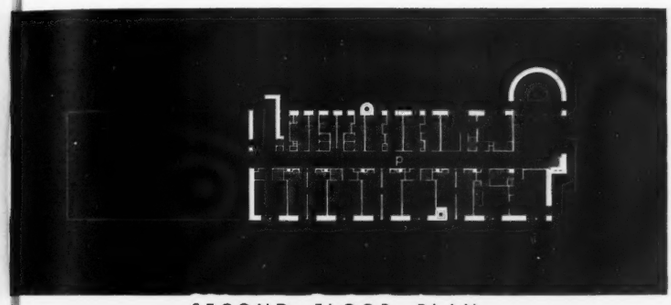
The Hotel Pohjanhovi, one of the northernmost buildings to have been erected by a contemporary Finnish architect, is situated in Rovaniemi, Lapland's capital, two miles south of the Arctic circle. It stands on the south bank of the Kemijoki, a swift shallow river, and faces north.

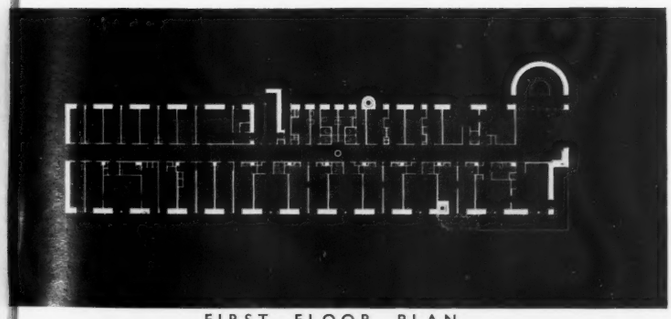
1, the river front, showing the main entrance with its reinforced concrete canopy opening out towards the north-west side on to wild open parkland. The town is at the opposite end of the building, where there is a public restaurant with an entrance from the street. The dining-room opens out on to a breakfast loggia, 2, which leads down to a sun terrace and tea garden, commanding a broad sweep of the Kemi river. The bedroom windows are arranged with a north prospect over the river, being placed on this side of the building in order also to obtain a view of the Aurora Borealis and the Midnight Sun.

The exterior surface is white rendered brickwork on reinforced concrete frame construction.

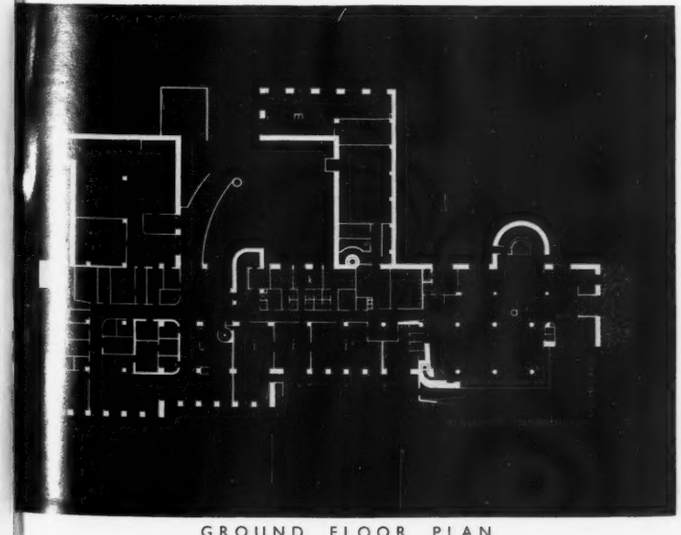
P. AND M. BLOMSTEDT, ARCHITECTS



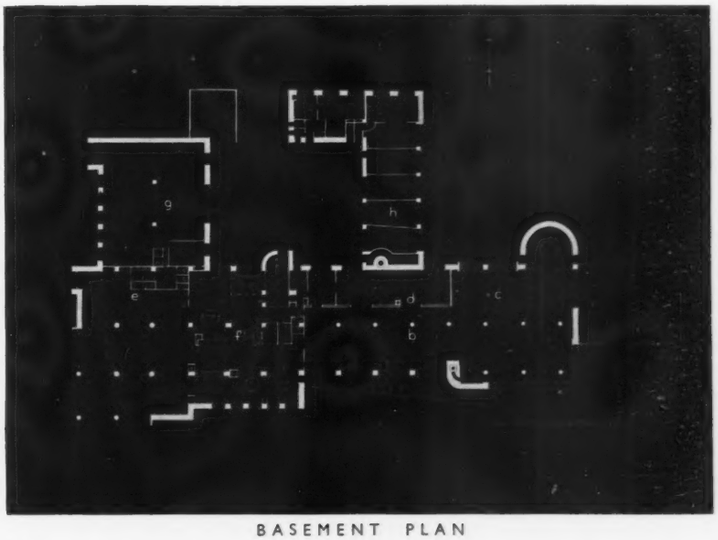
SECOND FLOOR PLAN



FIRST FLOOR PLAN



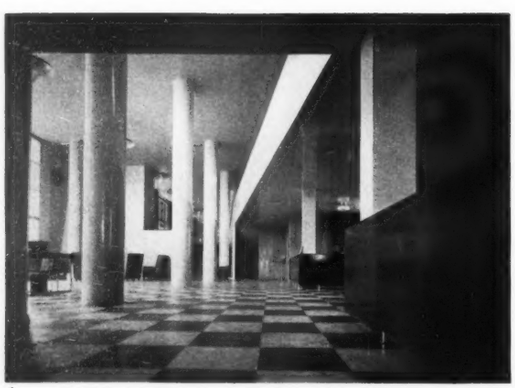
GROUND FLOOR PLAN



BASEMENT PLAN

HOTEL AT ROVANIEMI, LAPLAND

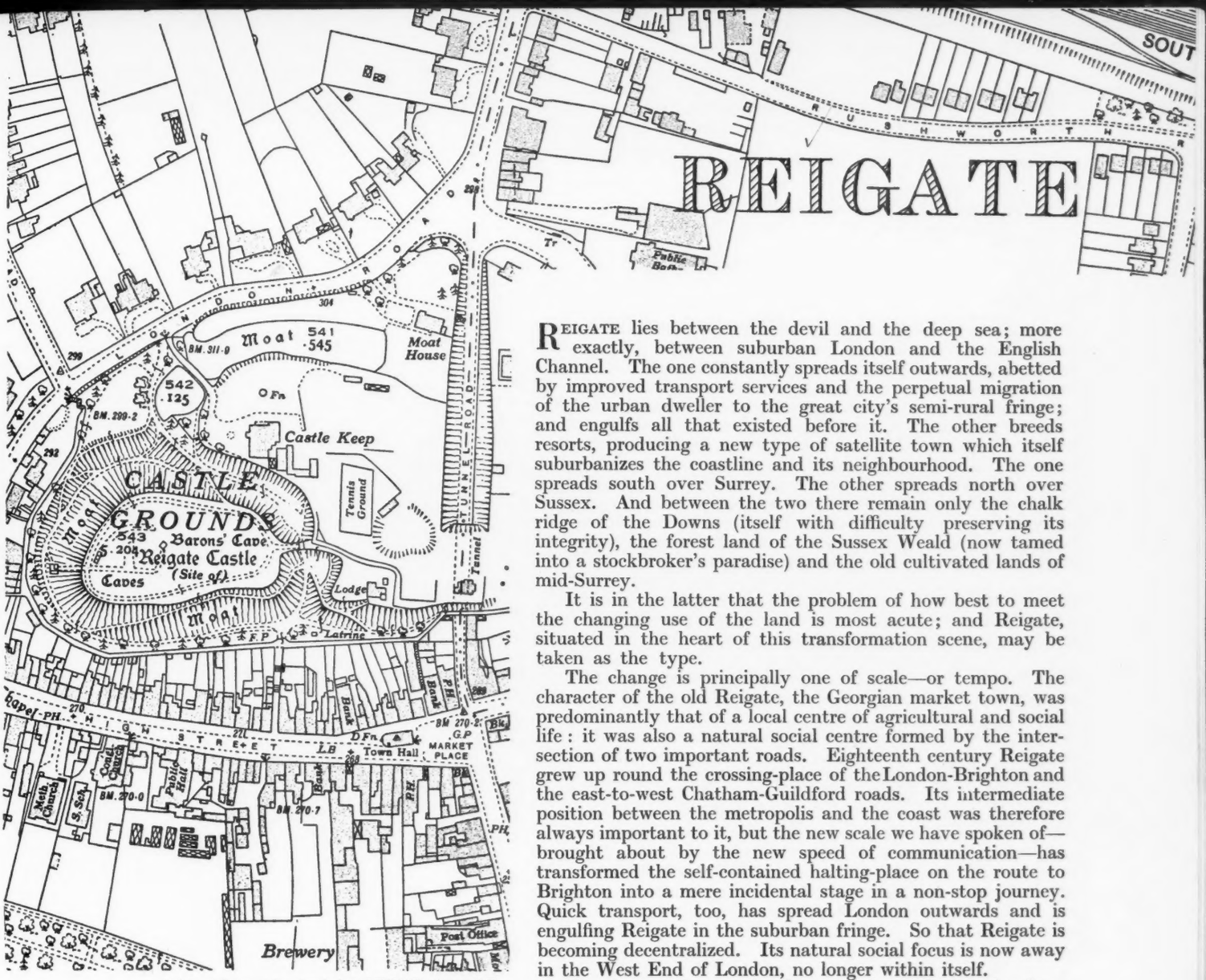
3



4

5

The hotel, besides containing a public restaurant, also includes garages, off-licence bar, stores and showrooms for commercial travellers on the ground floor.
The dining-room leads straight out of the main entrance hall, 4, by a short flight of stairs which returns on itself by a further flight up to a tea gallery over the reception clerk's counter. 3, the view of the hall from this tea gallery.
Double windows are provided throughout the building as a protection against the winter cold. In the main hall they are made of two glass walls in metal frames extending the whole height of the room and each thickness of glass is spaced 70 centimetres apart to accommodate flowers and growing plants at cill level. Convection currents of heated air rising from radiators beneath the cill prevent condensation of moisture on these windows and this warmed air circulates into the hall itself through regularly placed apertures at the top of the inner glass walls.
All the rooms are centrally heated with partly mechanical ventilation. The main entrance hall and each subsidiary hall on the two bedroom floors has a large corner fireplace which supplements the system of ventilation.
5, one of the forty bedrooms, which are each equipped with lavatory basins. These are placed in a curtained washing recess. The beds, owing to the light summer nights, stand with their heads back to the windows, which are double casement sashes opening inwards. Luggage rack, beds and side tables are all of tubular chromium plated steel, and can be "skated" easily over the rubber linoleum floors. The bedrooms are so planned that single rooms can be thrown open to form double rooms. The walls and ceilings throughout are painted with a very light cream eggshell gloss. The dining-room floor is in large pine squares and the chairs brown stained birch with cobalt blue upholstered seats. The hall has a rubber black and white chequer patterned floor. The long ebonized wood counter to the reception bureau is covered by a plate glass top displaying plans of the building.
The hotel was designed and commenced in 1935 by P. E. Blomstedt, who died in 1936. The building, including all the decoration, was completed by his wife, Märta Blomstedt.



Ordnance Survey: by permission of H.M. Stationery Office.

TOWNS IN TRANSITION

REIGATE lies between the devil and the deep sea; more exactly, between suburban London and the English Channel. The one constantly spreads itself outwards, abetted by improved transport services and the perpetual migration of the urban dweller to the great city's semi-rural fringe; and engulfs all that existed before it. The other breeds resorts, producing a new type of satellite town which itself suburbanizes the coastline and its neighbourhood. The one spreads south over Surrey. The other spreads north over Sussex. And between the two there remain only the chalk ridge of the Downs (itself with difficulty preserving its integrity), the forest land of the Sussex Weald (now tamed into a stockbroker's paradise) and the old cultivated lands of mid-Surrey.

It is in the latter that the problem of how best to meet the changing use of the land is most acute; and Reigate, situated in the heart of this transformation scene, may be taken as the type.

The change is principally one of scale—or tempo. The character of the old Reigate, the Georgian market town, was predominantly that of a local centre of agricultural and social life: it was also a natural social centre formed by the intersection of two important roads. Eighteenth century Reigate grew up round the crossing-place of the London-Brighton and the east-to-west Chatham-Guildford roads. Its intermediate position between the metropolis and the coast was therefore always important to it, but the new scale we have spoken of—brought about by the new speed of communication—has transformed the self-contained halting-place on the route to Brighton into a mere incidental stage in a non-stop journey. Quick transport, too, has spread London outwards and is engulfing Reigate in the suburban fringe. So that Reigate is becoming decentralized. Its natural social focus is now away in the West End of London, no longer within itself.

The change of tempo has been mostly gradual, as has been the suburbanization of the whole south-east of England, but it has been punctuated by particular events that have caused sudden acceleration of the process of change. The building of the first turnpike road in Surrey in 1699 (the road terminated at Reigate) was one; the opening up of the present direct road to London in 1755 was another; of course the popularization of the motor-car in the early years of this century was a third. It will be seen that all these occurrences are connected with communications, with which Reigate's history has been inextricably mixed up—even the foundation of the ancient Castle round which the medieval town established itself was due to its ability to command simultaneously from that situation the north-south route to the coast and the only east-west line of communication in the region that was on permanently dry ground. And now there is the threat of a great new orbital road, circling London, to relieve the metropolis of some of its cross-traffic, that would pass through or close to Reigate.

Such an event would have as marked repercussions on the face of Reigate as any in the past; though whether such a road is built or not is irrelevant to our purpose, for the changes it would bring are not, it must be insisted, revolutionary so much as an intensification of the change which has been going on gradually since modern traffic linked Reigate up with London.

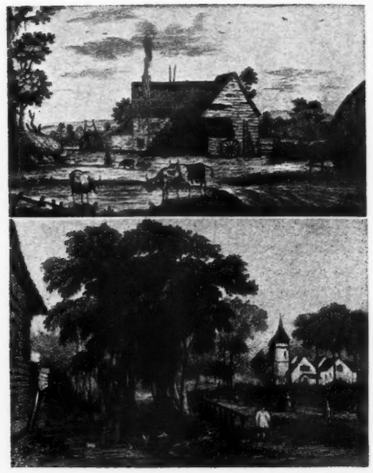
These changes that continue to take place only commit the town more inescapably to the new scale that we have

An early print of the tunnel through which all the traffic on the main London-Brighton road passes to enter the town of Reigate. The town's situation on important channels of communication has always influenced its history.

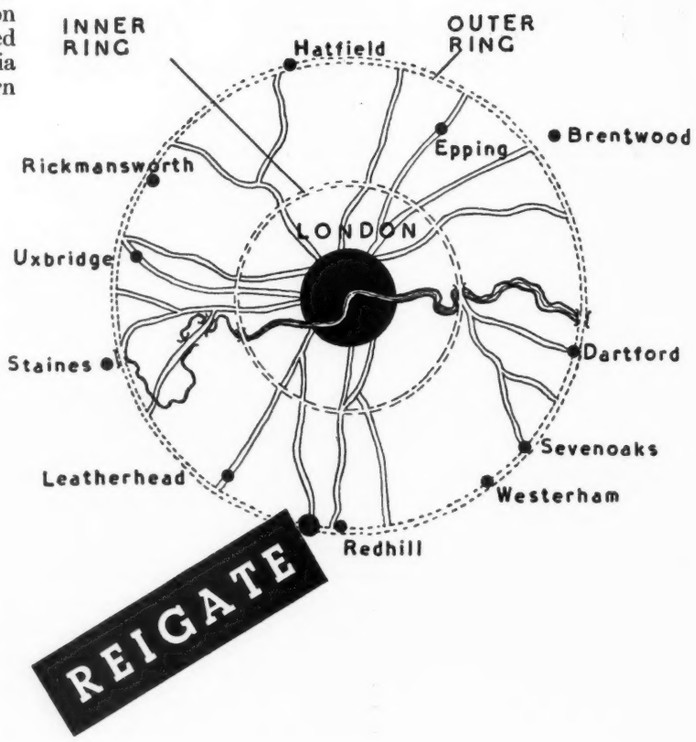
spoken of. Reigate's tragedy is that so far it has made no adjustment to the dominating existence of this new scale. Only in the new arterial roads that carve through Surrey the fast modern traffic's way to the sea can we see some glimpse of design adjusted to the modern scale. Reigate town has deliberately shut its eyes to the change; though the change is evident enough on the face of the town itself; motor traffic from all the south of England crowds its principal streets; its Georgian façades disappear to make way for the cinemas, tea-shops and chain-store branches inseparable from suburbia; the eighteenth century town hall finds itself threatened as an obstruction to traffic, and suburban estates surround the town on every side.

Now, suddenly or gradually, the old Reigate is going whether its admirers like it or not, and not until the fact of the change is admitted can it set about (before it is too late) adapting its outlook so that the new suburban, arterially situated Reigate is as good in its own way as the country town it is supplanting. Preservation is well enough, particularly when the object to be preserved is as fine of its kind as, for example, Reigate's market hall or any of the fine Georgian doorways that have not yet been swept away; but there is a kind of preservation that is really the by-product of intelligent development; that admits that things must change but, by foreseeing the change, can guide it into being something more constructive than disintegration. Reigate is losing one individuality, and without some such guidance and foresight it will have no chance of attaining a new individuality. At worst it will become another messy suburb; at best a preserve of Georgian remnants, buried in the suburban wilderness. We do not pretend here to suggest what shape it should take in the future, only to indicate the process by which it is losing any shape at all. The people of Reigate will agree with us that the distinction must be preserved between Reigate as a town and Reigate as a mere collection of suburban streets.

We have already made it clear that we are not discussing Reigate as an isolated phenomenon, but because it is typical of the conditions of so many towns similarly situated on the fringe of a big city; it is especially typical of the condition of the towns which find themselves influenced by new arterial road development. These towns must know what is happening to them if they are going to be able to do anything to preserve their integrity. Suburbanization and domination by arterial lines of communication are common as well as urgent problems. Similar towns have been swallowed up and are now far past all rescue, but those that suburbia and the motor car are only now beginning to engulf can learn from the fate of the others.



A hundred years ago Peckham (top) and Tooting (bottom), on the outer fringe of a smaller London, were in the same position as the towns illustrated on this page. It is from their fate that the latter have to learn.



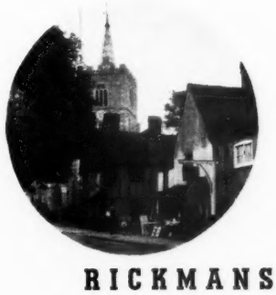
An inner ring of towns round London has already become submerged in the spread of London outwards, and these towns have entirely lost their original character as places with a distinct individuality. But outside these, forming another ring, are a number of towns, many with considerable architectural charm, that have not yet been destroyed, although the process of disintegration has begun. Motor traffic, linking them up with London, has brought about a number of changes, usually destructive because not controlled, and the process of change is likely to be accelerated. New arterial roads will be built, such as those projected in the Ministry of Transport's new Road Survey, which will involve even more deeply in modern development the outer ring of towns, of which Reigate is here taken as the type.

TRANSITION

WESTERHAM

SEVENOAKS

LEATHERHEAD



RICKMANSWORTH

DARTFORD

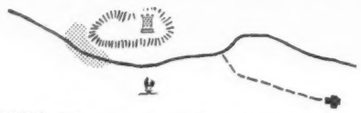
REIGATE

The motor-car and the roads that serve it have more than traffic significance. Roads are a principal source of territorial change. The sudden addition of an arterial road to the features of a locality, the gradual arterialization of its local road system, the continued growth of passing motor traffic, all mean that that locality must expect to have to adjust itself to a new scale and to a change of individuality. The new elements that transport brings: population, chain stores, bus services, road-houses, will, if left to themselves, destroy the character of the place by merging it into the indeterminate character of a suburb. Usually this process is a gradual one, and the transformation has occurred before it is noticed; but today round London there are still a number of small towns that, in spite of development in some degree, still preserve some individuality. Among these towns are many that lie along the outer fringe of London. Being forewarned of coming change from the fate of others they have an exceptional opportunity of forearming themselves with plans to prevent the change being fatal. Westerham, Sevenoaks, Reigate, Leatherhead, Rickmansworth, Dartford are all in this position. On the following pages Reigate is taken as the type of this town, and the process of change, as illustrated in Reigate, is examined. In the air view of Reigate, above, the surviving character of the Georgian town is seen still evident in the buildings that surround the two intersecting traffic routes, though even since this view was taken one more drastic, but inevitable, change has taken place. The fine coaching inn at the cross-roads, typical of the self-contained character that Reigate is losing, has been demolished to make way for shops and its old garden and orchard, seen in the left foreground, has disappeared to make way for a car park.

Reigate in the nineteenth century.

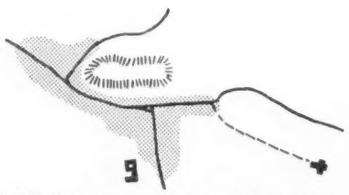
PLAN AND COMMUNICATIONS

REIGATE IN TRANSITION

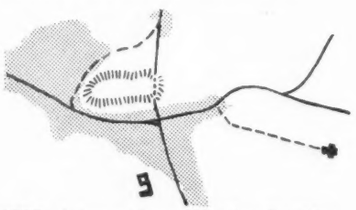


1400 The town under the protection of the Castle, between it and a religious house, away from the earlier settlement round the Church.

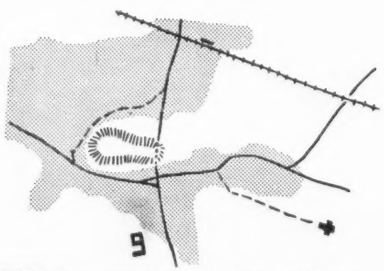
1600 The market town grows in importance because of its situation on the main road to London. The Priory has become secularized.



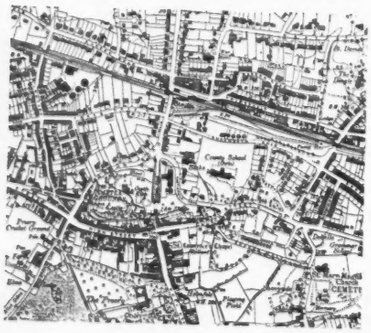
1710 The turnpike road from the south finally transfers the centre of the town to a new market place at the cross roads. The Castle is now disused.



1825 A tunnel under the Castle hill makes the route to London more direct. A new road north-east to Croydon makes the intersection busier still.



1850 The coming of the railway leaves the old town untouched. Residential development round the branch line station is isolated by the Castle hill. Industrial development concentrates round the new main-line town of Redhill.



TODAY Motor traffic brings development back into the middle of Reigate, and at the same time spreads it outwards in the general suburbanization of the fringe of London.

The parish of Reigate extends from the crest of the chalk, 760 feet above sea level, over the upper green sand, the gault, the lower green sand and the Atherfield clay, on to the Wealden clay, the town itself being built on the lower green sand at a level of 270 feet. The original establishment of the town derives from this geological formation, as it grew under the shelter of the Castle, and the latter derived its importance from the fact that it commanded the only natural line of communication from east to west that was permanently on dry ground, and was at the same time one of a line of hill-top fortifications running north and south between London and the coast. The town clustered beneath the Castle for protection, between the latter and an important religious house (on the site of the present Priory). It always grew independently of its parish church which remained on the site of an earlier settlement.

In the Middle Ages it was market town for the region; its only industries being stone quarrying and the production of oatmeal and of sand for building and glassmaking, but communications and geological formation continued to dominate its development. In 1699 the first turnpike road in Surrey terminated at Reigate, having been built to bridge the soft clay area between two areas of drier soil, and by the middle of the eighteenth century it was a well-known halting place on the way to London. The present road up and round Reigate Hill was built in 1755 and the road to Croydon, branching east of the Town Hall, in 1807. The next year the new Town Hall was built, finalizing the transit of the centre of the town from the old market-place at the west end of the High Street to the new important traffic centre. Then in 1823 the well-known tunnel was bored under the eastern Castle hill, giving direct access to London and the north in place of the circular road around the Castle.

In 1842 occurred an event that might have revolutionized the life of Reigate: the coming of the railway; but the people of Reigate would have none of it in their town and stipulated that it must be kept at least two miles distant.

The ascent to Reigate Castle from the High Street, showing that immediately behind the Georgian façades medieval building still remains. A town is organic in its growth, and in many consistently Georgian towns the Georgian character is only skin deep.

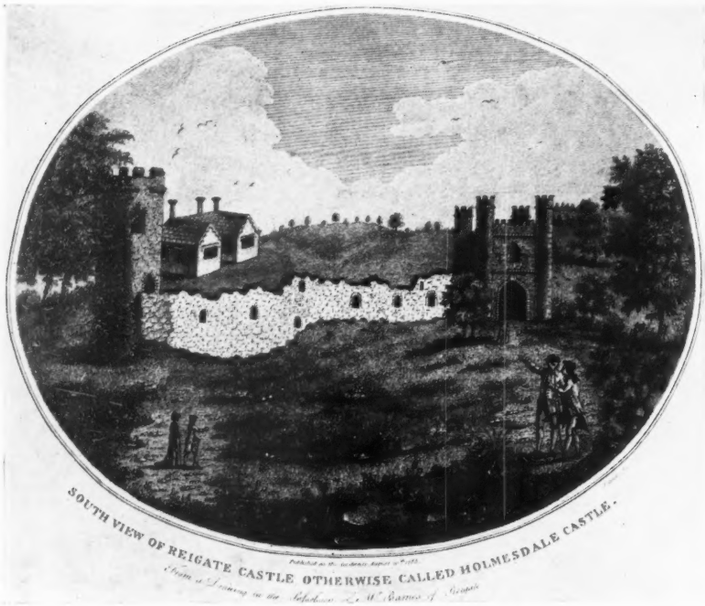
So the important junction of the Dover and Brighton lines became established at what is now Redhill. Redhill became the scene of Victorian industrial development and Reigate was passed by. This time communications had a negative influence and Reigate remained virtually a Georgian market town, well apart from the main stream of development. Even the establishment, in 1849, of a branch line railway station did little to alter Reigate's seclusion. It resulted in some development round the station itself, but the Castle hill continued to act as a barrier between this development and the centre of the town. It was the popularization of the motor-car that eventually brought development to other places than along the railways; and particularly within reach of London and along the main motor roads. In the twentieth century the centre of Reigate is once more in the main stream of development. Its individuality was spared the onslaught of the railways. It has suffered considerably already from the onslaught of the motorized roads, though a nucleus with character and individuality, and some isolated examples of fine Georgian architecture, still remain.

RAILWAY STATION (1849): LOCAL DEVELOPMENT.
NEW CROYDON ROAD (1807).
TUNNEL UNDER CASTLE HILL (1823).
CENTRE OF GEORGIAN TOWN AT CROSS ROADS: COACHING INN AND MARKET HALL (1808).
MEDIEVAL CASTLE.
OLD LONDON ROAD ROUND CASTLE.
ORIGINAL TOWN UNDER PROTECTION OF CASTLE.

REIGATE MARKET PLACE.

An early nineteenth century print of Reigate Market Place shows it displaying all the components as well as the charm of the Georgian market town: spacious streets, architecture of consistency and dignity, a focal point in an elegant market hall and social life provided for in a number of noble inns. Today the market hall remains, but only portions of the Georgian façades have not disappeared to make way for modern development, and the Town Hall itself, the last remnant of civic unity, is threatened with demolition, ironically enough for the convenience of the passing traffic which has always been the basis of Reigate's prosperity. On the right a portion of the above early aspect of Reigate is compared with the same aspect today. The last chapter of the history outlined on the facing page sees motor-cars thronging the peaceful streets and the "Swan" inn sold for demolition.

THE SWAN, 1838-1938



W O R T H

The history of Reigate, which began with the medieval castle on Reigate Hill, has been summarized on the preceding pages. The period in its history when it achieved the greatest distinction as a town was the Georgian period, and on this and the facing page some of the most notable examples of the surviving architecture of that period — architecture that is still the most distinguished in the town and deserving of all possible local effort to preserve it— are described and illustrated.

G E O R G I A N A R C H

Next to the Barons, which see overleaf, and the Priory, which is not counted as belonging to the actual town, Brown's Lodge (south-west view and doorway detail on this page) is the most distinguished of the Georgian houses in Reigate. It was built in 1786 and is situated at the extreme west end of the High Street, occupying a triangular plot formed by the junction of a by-road with the main road. The entrance elevation is of odd design dominated by two chimney stacks with a parapeted roof valley between, but the west elevation is of more conventional symmetrical design with a medallion on the pediment and recessed circular headed windows on the ground floor below. The porch lacks the decorations to the capitals of the columns as they have perished, being in plaster instead of the more usual carved wood or cast lead. The brickwork is of the fine variegated deep red colour of all local Georgian work. The other three doorways shown are typical of a number of fine local examples, presenting a wide variety of type, all in painted wood, serving as central feature in a plain brick façade. The porch doorway, with free-standing columns and broken pediment, adorns a house in the

P R E S E R V I N G

I T E C T U R E I N R E I G A T E

middle of the south side of the High Street (see page 238). The house dates from about 1780, though the doorway is probably later. The next doorway, to a house adjoining Brown's Lodge, is detailed in very low relief and has a triangular pediment of unusual curved shape. The third, which is situated near the site of the original market, is a good example, also of about 1780, of the late Georgian style with an elegant fanlight. The fourth photograph in the row shows a charming example of a late Regency or early Victorian hooded window in the stucco front of a house in Bell Street. This house stands on the site of St. Lawrence's Chapel, which marked the cross-road site in the early days of the town, and still contains medieval remains. Above, on the left, is another fine doorway, this time with a cantilevered hood with carved brackets, forming the central feature of a house, now used as offices, at the lower end of Bell Street, almost the last building before the grounds of the Priory begin. This house has a projecting brick band at first floor level, eaves instead of a cornice, and the thick-section window bars characteristic of its fairly early date. The remaining illustration shows Reigate's celebrated inn, the "Swan," situated immediately across the road from the Town Hall. Unfortunately it and the building adjacent to it, which form a fine group of consistent urban character, and give much of its remaining dignity to the centre of Reigate, are already doomed. The "Swan" was sold only a few months ago and demolition is due to begin shortly. On the site will rise new premises for a mass-production tailor. The "Swan" therefore has only survived by a few years the even more famous "White Hart," which, at an opposite corner of the cross-roads, was one of the most famous coaching inns on the route to London (see page 237). This was demolished in 1933. The "Swan" is of elegant symmetrical design with bold bay windows on the ground floor and first floor windows of unusual segmental plan. The upper windows were once of the same pattern as can be seen in the print reproduced on page 233. The iron balustrading was added about 1830. Adjoining the "Swan" can be seen in the same photograph a chemist's shop of rather earlier period, with similar stucco front and a bow window of very unusual design: a particularly fine example of the shop fronts of this period. This also is due to be demolished with the "Swan."

THE BARONS, the finest Georgian house in Reigate, stands in Church Street, the continuation of the High Street east of the cross-roads, at the corner of the old lane leading to the parish church. It was built about 1710 in the form of a rectangular block with four rooms surrounding a central staircase hall. The exterior has a brick cornice and parapet panelled to carry up the line of the windows, and a decorated ionic porch. The back elevation also has a fine porch from which a flight of curved steps with wrought iron balustrade leads to the garden level. An east wing was added at the end of the eighteenth century. Although now used as an office the house still contains its original panelling and fireplaces.

THE TOWN HALL was erected in 1708. It measures 52 ft. 6 ins. by 27 ft. 3 ins. plus a circular projection at the west end. This latter housed the public stairway to the Court House on the first floor, while a stair on the north side led to the Justices' Room at the east end. The lower storey was an open market. The bell and clock-tower originally stood above the old cage, which was removed in 1800. Two of the corner chimneys are dummies. The Hall is now used as a public library, and is described in the Surrey volume of the Victoria County Histories as " the present ugly building."

THE PROCESS

Georgian Reigate, the self-contained market town, survived almost intact until the beginning of this century. But since then various factors have brought the town again into the mid-stream of development, not as an entity of its own but as an outlying suburb of London, with all the changes on the face of the town that this implies. These factors are summarized below, and on the facing and the following pages is shown their action on particular pieces of the old town.

THE AGENTS OF DISINTEGRATION

INCREASE OF POPULATION

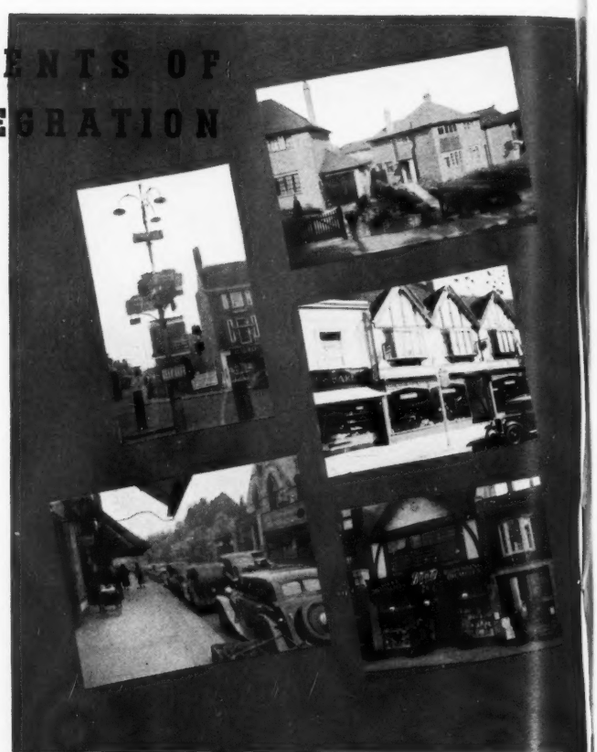
FAST MOTOR TRAFFIC

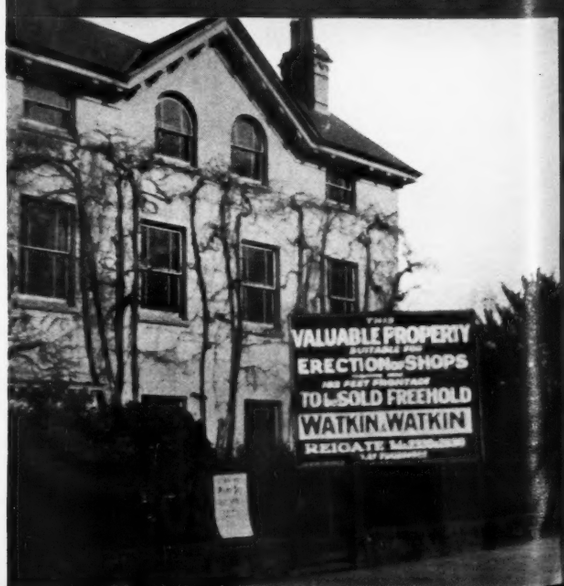
DISAPPEARANCE OF ARCHITECTURAL STANDARDS

INVASION OF THE OUTSIDE WORLD

CHAIN STORE DEVELOPMENT

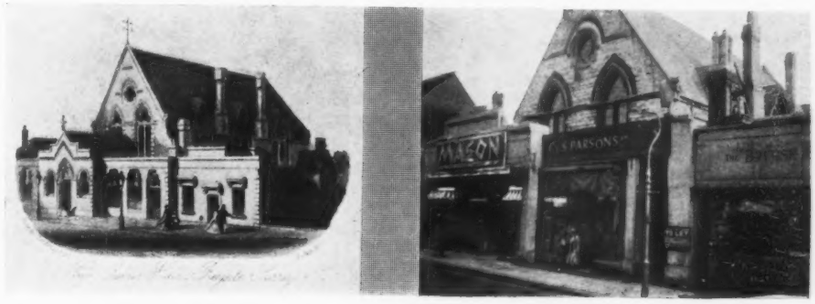
ALL RESULT IN THE DISINTEGRATION OF THE OLD ARCHITECTURAL UNITY



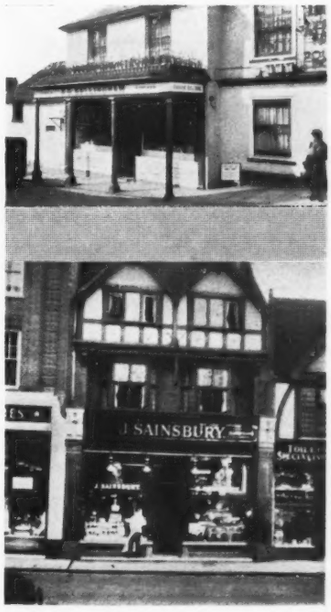


OF DISINTEGRATION

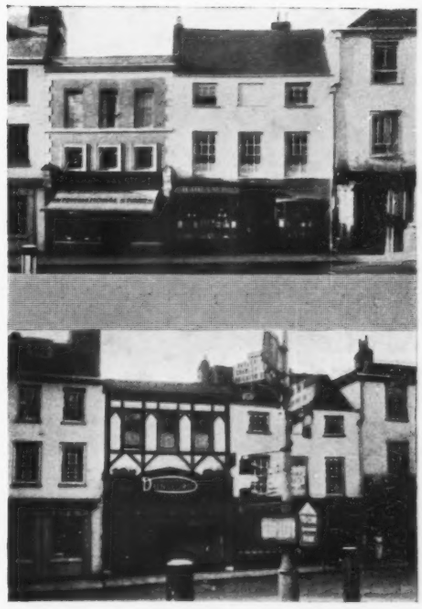
The "White Hart" inn at Reigate was one of the most famous of the old coaching inns on the route from London to Brighton. From the beginning of the eighteenth century there was an important inn on this cross-roads site. The fine building shown in the photograph (taken in 1932) was erected in 1775, the stucco of the front, the moulded plaster architraves to the windows and the porch with its sculptured sign, all equally good of their period, being added about 1835. But the increased speed of motor-traffic diminished Reigate's importance as a stage halt and the decentralization which has characterized its recent development destroyed its significance as a social focus; so the inn was demolished in 1933 to make way for a commercial building of imitation Georgian design. The next photograph shows the appearance of the site today, with the corner plot still vacant. A new "White Hart," suitably reduced in scale and of remarkably undistinguished architecture, was built round the corner in Church Street on part of the site of the old "White Hart" garden, the rest of which has become a car-park. This is shown in the small photograph.



Another example of the recent disintegration of Reigate as a self-contained social entity is the change that has overtaken the old Public Hall. Not in this case of much architectural merit, this hall (shown in a contemporary print in the left-hand illustration) was built in 1863. But its usefulness as a social centre came to an end and the commercialization of Reigate High Street resulted in the erection of shops along the pavement in front of it, right-hand photograph. The hall itself is now incorporated in one of the shops as a fashion show-room.



Decay in the standards of architectural taste has transformed the High Street from a dignified architectural unity to a medley of mixed and competing styles. Here a charming early nineteenth century butcher's shop, which happily still survives at the extreme western end of the High Street, is contrasted with a branch of a chain-store provision merchant, which introduces into the street an entirely unsuitable pair of pseudo medieval gables, a characteristic chain-store innovation.



An even more unfortunate example of unsuitable "improvement" is shown by the two photographs on the right, taken in 1933 and today, of a building in a prominent position at the east end of the High Street — between the "Swan" inn and the cross-roads. A decent Georgian façade has had planted on it a number of imitation oak beams, that are ugly in themselves and entirely destroy the continuity of the architecture of the street. The first floor windows have also been obscured by an ugly shop fascia.

THE PROCESS OF DISINTEGRATION

The process of commercialization that is part of modern development, together with the decay of standards of design, is shown in the two photographs on the left of Bell Street, Reigate—forming part of the main Brighton Road—taken in 1920 and today. Not only have domestic buildings given place to shops and Georgian to heterogeneous design, but a confusion of signs and advertisements has come with the motor traffic. The centre photograph shows another example of the disappearance of unity of taste: a fine Georgian house has now incorporated in it a "ye olde" tea shop. Right, another example of "improvement"; what was a few years ago a suitable Georgian sash window has recently been replaced by a tudor casement with leaded lights.

The process of change can be summarized in the forms of housing: town house (18th century); country villa (19th century); and suburban estate (20th century)

Reigate is faced inevitably with local development and change of an even more drastic kind than the changes illustrated on the preceding pages. The factors of change continue to exert their influence. To preserve any of its individuality—to avoid being totally submerged in the wilderness of suburban London—the people of Reigate must understand what is happening to their town and what is going to happen to it, and make sure that plans are made accordingly. Reigate's future is in the hands of its own citizens.

"Triumphal arch erected by the inhabitants of Reigate on the occasion of Her Majesty's progress to Brighton, 4th October, 1837."

SHOWROOMS

QUIGGIN AND GEE

THE SITE Bold Street and Wood Street, Liverpool. The building houses the offices and showrooms of the Liverpool Gas Company.

PLANNING On the ground floor is the main showroom: 10,000 square feet in area. Soft toned marbles are used on the walls, and the pillars stand on a marble pavement. On each side of the main hall is a series of arches in which modern gas apparatus is displayed. A short flight of steps leads down to the basement showroom. In this showroom are examples of heavy-duty gas appliances. The gas-fired boilers and pumps, which are engaged in heating and cleansing the air of the whole structure, are show pieces, set behind a moveable glass screen. On the first floor is a reception room giving access to a demonstration theatre in which a hundred people can be seated to see, hear, or take part in demonstrations, recitals or plays. In addition, there is a projection room containing the latest type of talkie machines. Also on this floor are the offices of the principal administrators. Four floors are devoted to offices and staff accommodation. The kitchen on the fifth floor is on permanent exhibition to the public. The sixth floor houses the board suite.

THE VIEWS ILLUSTRATED 1, the Bold Street elevation. 2, a corner of the ground floor showroom, 3, the terrace to the staff dining-room.

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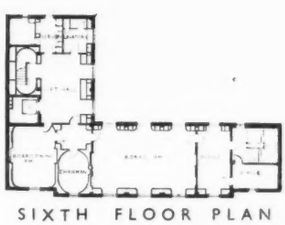
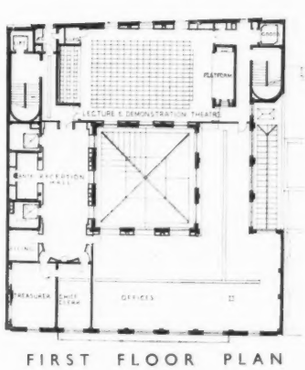
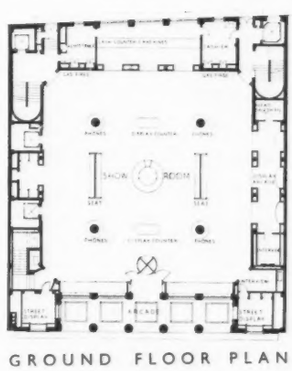
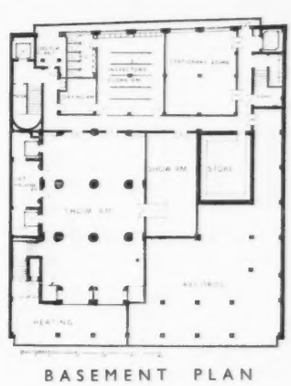

SIXTH FLOOR PLAN


FIRST FLOOR PLAN


GROUND FLOOR PLAN


BASEMENT PLAN

SHOWROOMS

QUIGGIN AND GEE

STRUCTURE AND MATERIALS

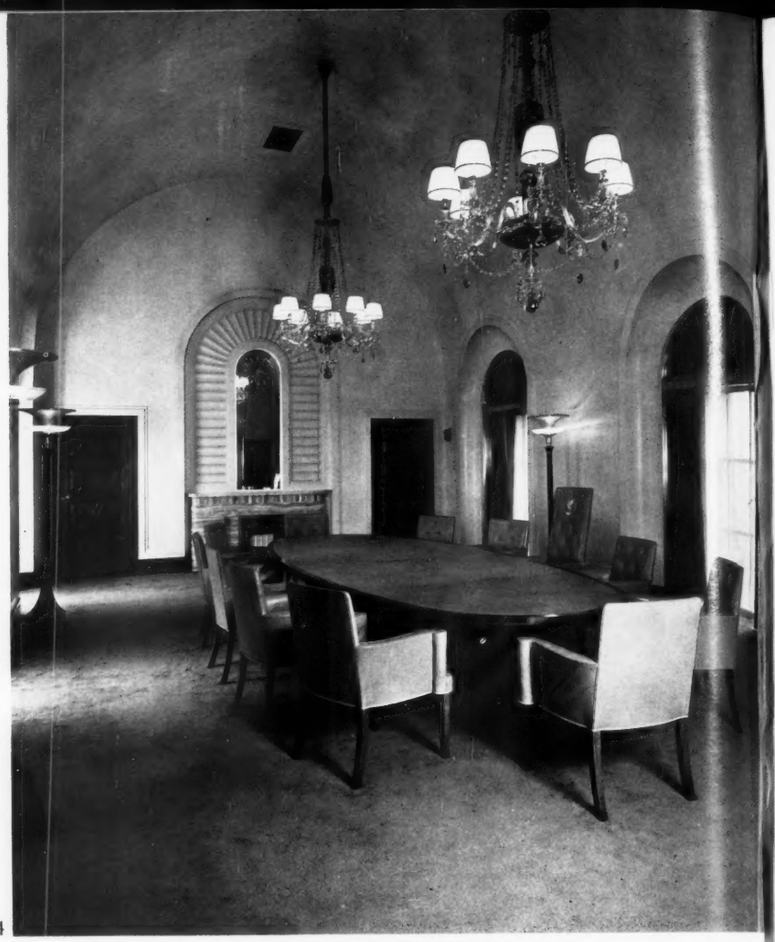
Steel frame construction. The Bold Street elevation is veneered with large slabs of Quarzite. The arcade and architraves to the large vertical windows are of Swedish green marble: the four display windows and entrance doors in silver and coinage bronze. The Wood Street elevation is faced in $2\frac{3}{8}$ in. bricks, from North Wales.

EQUIPMENT AND FINISHES

The building, which is known as Radiant House, is warmed by the low temperature Invisible Panel system. The temperature in each room is thermostatically controlled. The supply and extract system of ventilation is concealed in the structure, and provides the building with a constant interchange of filtered and tempered fresh air. The boiler plant, dealing with both the panel warming and fresh air supply systems, is situated at one end of the basement showroom, enabling those who may be interested in boiler plant to inspect it. The performance of the plant is indicated and recorded in a control cubicle in the centre of the boiler room and from here it is possible to note the conditions obtaining in all representative positions of the building and the functioning of the boilers and incidental apparatus connected with the heating and ventilation. Pneumatic tubes pass messages to and from the new building to the engineers' department in an adjoining street. Tubes are also available for inter-departmental use, controlled by a central station on the first floor. There are two telephone systems. Public telephones on a 30-line switchboard have 66 internal extensions, 19 of these being in the Duke Street premises, and 47 in Bold Street. Departments in Radiant House will communicate with each other by means of 39 Dictograph instruments. All the furniture is steel with the exception of that in private offices and the board suite. The showroom walls are lined with Trani Mirabelle marble. Panelling in the reception room is in Australian walnut and Macassar ebony: furniture in the same woods. The golden onyx fireplace in this room is surmounted by an eagle which is reputed to have been in the Golden Eagle Tavern on this site about 1780. The board-room ceiling and walls are in plaster work painted and wax-polished. Woodwork at doors, skirtings, etc., is in veneered and cross banded walnut; windows, silver and coinage bronze; fireplace, golden onyx; candelabra, pale bottle green glass; curtains, rust colour, hand made; carpet, hand-tufted Wilton in one piece; furniture in walnut and natural coloured hide. In the board dining-room the panelling is in figured teak; furniture, walnut; upholstery, green leather; ceiling, green paint to match; fireplace, Swedish green marble.

THE VIEWS ILLUSTRATED

4, the board-room. 5, the board dining-room. 6, the reception room. 7, the servery.



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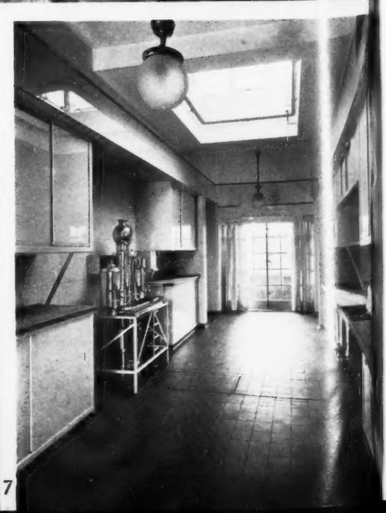


7

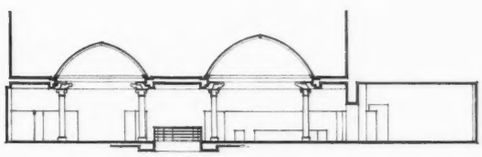
S T O R E S

PAKINGTON AND ENTHOVEN

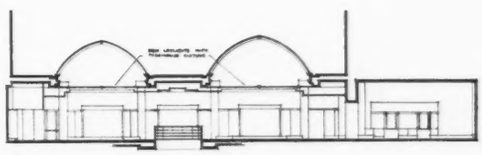
1

THE SITE Reconstruction of part of Messrs. Robinson & Cleaver's premises in Regent Street, London.

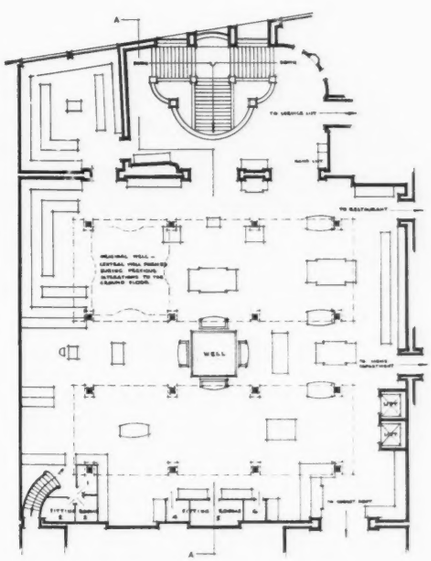
THE ALTERATIONS The main portion of the first floor had previously been used for the sale of low-priced dress goods. It being intended to change the trading to that of a Fashion Floor, it became necessary to make many modifications both in the character and layout. The alabaster casing to the piers was removed and replaced with cellulosed plaster. The two barrel-vaulted roof-lights, glazed with ornamental glass, of the old shop (designed by the late George Crickmay) were screened with metal lay-lights glazed with thermolux glass. In order to clear the floor for display platforms and tables only, various portions are partitioned off for stock to which access is obtained out of sight. Eight out of the ten fitting-rooms are grouped together opening off a foyer, recessed off the selling space.



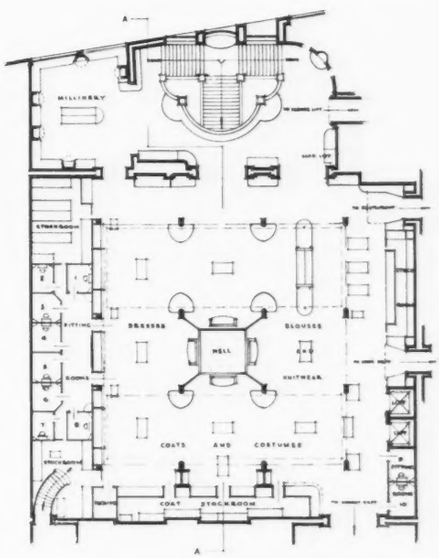
SECTION A-A BEFORE ALTERATION



SECTION A-A AFTER ALTERATION



PLAN BEFORE ALTERATION



PLAN AFTER ALTERATION

STORES

PAKINGTON AND ENTHOVEN

2 BEFORE RECONSTRUCTION

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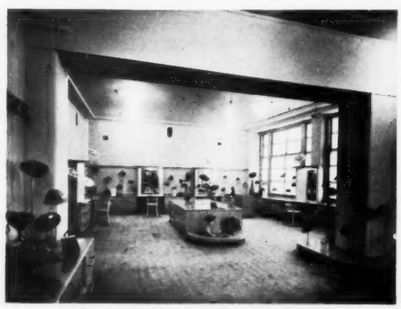

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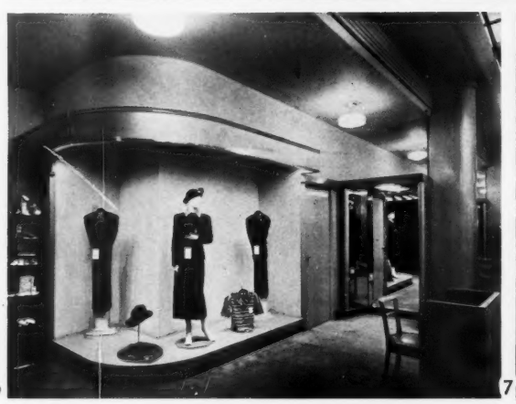

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8

MATERIALS

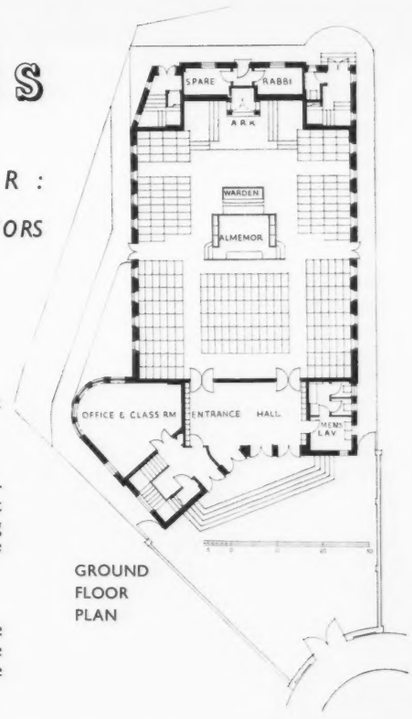
The woodwork is straight-grained oak treated with distemper to a warm pinkish grey tint; the carpet grey, close covered. The plastering to the ceiling proper and fixed down border, painted in pale string: to columns and certain vertical portions, metallic silver cellulose. Walls to the fitting-rooms' foyer are in zebrano wood veneer; metalwork to lighting fittings, trying-on mirrors, etc., chromium, satin finished. All display platforms are covered with string-coloured rubber linoleum; backgrounds of beige paint combed vertically on a white plaster ground.

THE VIEWS ILLUSTRATED

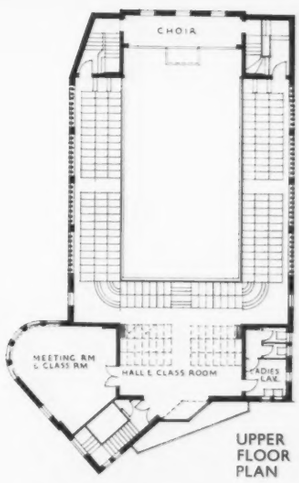
1, the door leading to the restaurant. 2, a general view of the floor before alteration. 3, the same after alteration. 4, the millinery department. 5, the foyer to the fitting-rooms. 6, full length trying-on mirrors, and 7, trying-on mirrors in the millinery department. 8, illustrated displays, stock-fitments and entrances to the fitting-room foyer.

SYNAGOGUES

WALTER LANDAUER: WILLS AND KAULA, COLLABORATORS



GROUND FLOOR PLAN



UPPER FLOOR PLAN

THE SITE

Heathfield Park, Willesden Green. The site has a street frontage of only about 25ft.

PLANNING

The building also serves as a communal centre and contains classrooms for children. A portion of the site at the rear is reserved for a future school building. Folding screens enable the classroom over the entrance hall to be used as an extension to the gallery when required.

STRUCTURE AND MATERIALS

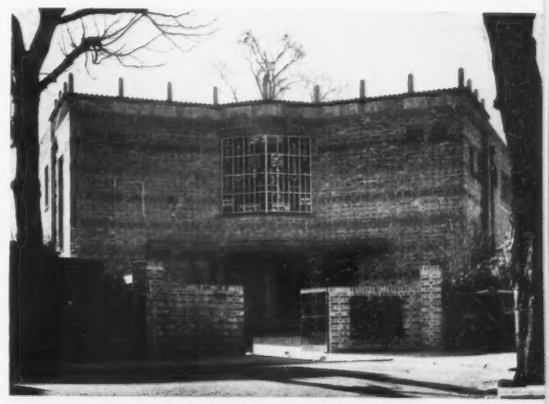
Walls are brick; gallery floors reinforced concrete; the roof, timber, with a vulcanite covering. The stone cornice is capped with Spanish tiles and stone pinnacles. On the centre pinnacle is the sign of David, executed in gilt.

EQUIPMENT AND FINISHES

Heating is by electric tubes and radiators, thermostatically controlled. The Ark has gilt doors with lattice work containing the Hebrew words of the Ten Commandments and curtains of a deep bluish green velvet, with gold embroidery. The platform of the Ark is finished in heather brown tiles. The walls are plastered rough texture and finished a broken greenish-grey colour. The ceiling, including beams, and the joinery are stained a greyish-brown. The main floor is of birch blocks, the gangways being covered with a deep red carpet. The ten electric light chandeliers are of polished brass; the wrought-iron railings and other electric light fittings are gilt.

THE VIEWS ILLUSTRATED

1, the street elevation. 2, the brick and stone canopy of the Ark, showing, at ceiling level, the brick grille to the choir gallery. 3, a general view of the interior.



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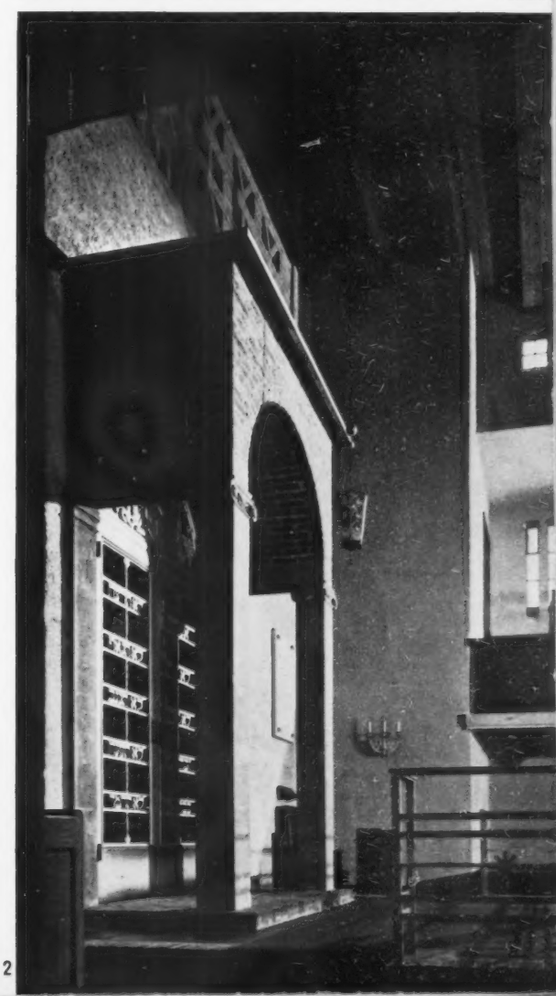


2

OFFICES

BERTIE CREWE AND KAY

THE SITE Broadwick Street, London. The site was formerly occupied by a motor coach station.

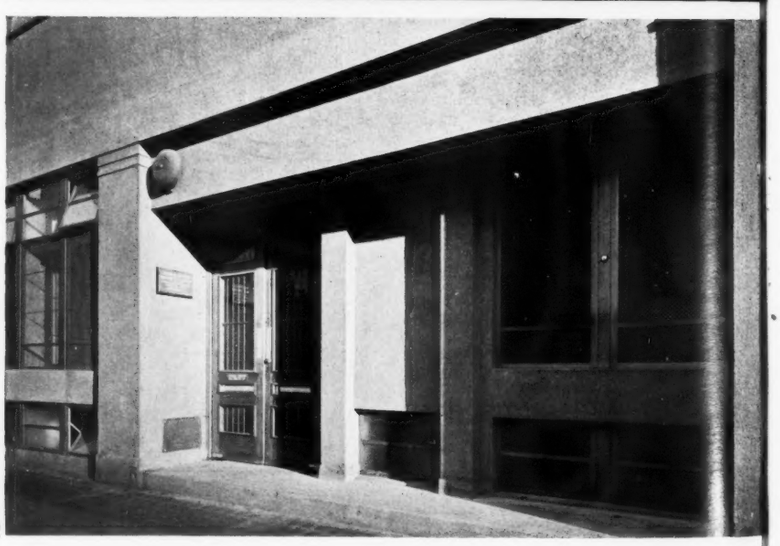
PLANNING The planning requirements called for a large well-lit building, with floors suitable for office letting. A central entrance has been provided from Broadwick Street and a loading and unloading dock, accessible from a side street. The remainder of the floors are left as open space interrupted only by the structural columns. This space will be subdivided according to the individual requirements of the tenants, who have been invited to consult the architects in planning their offices.

STRUCTURE AND MATERIALS The structure is steel-framed with concrete floors, with brick infilling for the external walls.

EQUIPMENT AND FINISHES There are two lifts : one passenger and one goods lift. Electric light, power, gas and telephone are provided for each floor. The building is protected against fire by two independent sprinkler systems and a dry hydrant riser for each floor; a number of hand appliances have also been provided.

THE VIEWS ILLUSTRATED 1, the Broadwick Street elevation. 2, a detail of the main entrance. 3, the entrance hall.

1



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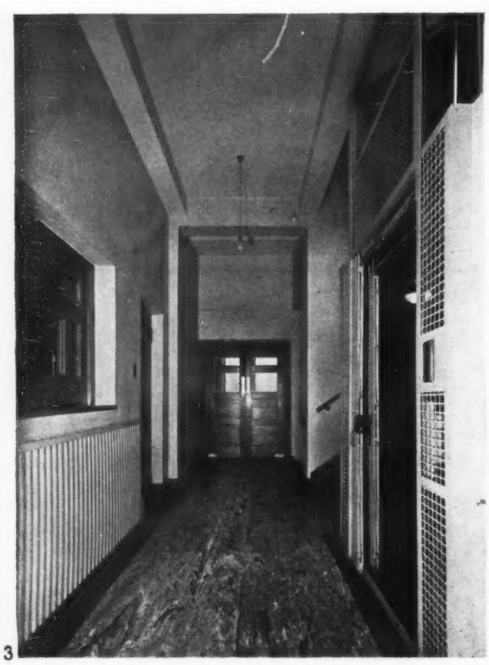

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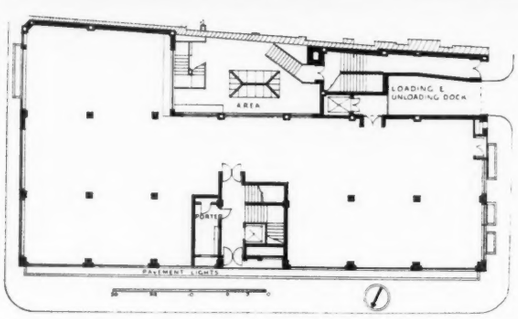


GROUND FLOOR PLAN

ASYMMETRICAL GARDEN PLANNING

THE ORIENTAL AESTHETIC

By Christopher Tunnard

SO-CALLED "formal" gardens, in which planning has not been influenced by the existence of natural phenomena or the exigencies of use (architect-designed caprices of the academies) are usually symmetrically planned. This has not always been so; in the Middle Ages the unsymmetrical garden, "that strange and recondite set of fancies," was often the accompaniment of the feudal dwelling. Evelyn was the first Englishman to use the word "asymmetry"—he was discussing the town planning of London—but in his writings also occur the first mention of the words "vista" and "canal," those essential characteristics of the axial, symmetrical gardens of the *Grand Siècle*. In spite of the intervening occurrence of the landscape garden (which significantly arrived from China on a porcelain vase by way of Tivoli and Cooper's Hill) symmetrical planning returned with the Italianate revival in the nineteenth century. Only today, with the death of the culture which lauded the axial vista, that most snobbish of all forms of Renaissance planning, has the cult of symmetry begun to suffer a deserved eclipse.

If we analyze designs of most gardens planned on the axial system, we find that the common practice is to make the right side of the plan repeat the left; that is, right and left balance on a vertical axis. This is called "inversion" and is the most usual form of symmetry employed in gardens.

Towards the end of the last century there was a breaking-away from the stocking of symmetrically-arranged groups of beds with plants placed in rows and geometrical patterns—carpet-bedding and bedding-out. One or two designers declared that the stiff lines of the borders produced a sufficiently "formal" effect to warrant what they called a more natural type of planting; thus herbaceous borders came into being, and one occasionally saw an old box-edged garden being planted with shrubs, herbs and colonies of bulbs. Planting became asymmetrical, but the layout of this type of garden has remained in the old state. One might go so far as to say that ninety per cent. of so-called "formal" gardens are created on this rule, which has been, and probably will continue to be, an eminently safe one for any cautious designer to follow.

The remaining ten per cent. of "formal" designs are based on the system of double inversion, or balance on a diagonal axis. Such plans resolve themselves into states of single inversion if viewed from certain angles, but where this form of balance is consciously used care is taken that the effect of diagonal balance shall be apparent where it is needed. Such designs are not symmetrical, but are nevertheless well balanced, although more delicately than those which rely on a vertical axis. Their æsthetic appeal lies indeed in the fact that their special form of balance is less easily recognized.

The next step, taking us still further from symmetry, and into a new field of conscious exploration, reveals the existence of a form of balance which has been termed "occult." It is essentially a relative quality depending on the interplay of background and foreground, height and depth, motion and rest, but as such it can be reduced to a science and obtains through all composition in art and nature. Primitive peoples have always been responsive to its urge. The native whose scanty attire consists of a flower placed over the right or left ear, is relying on the artistic effectiveness of asymmetry against a strictly symmetrical background (what more obvious example of symmetry than the human face?) an arrangement which does not destroy balance but serves to accentuate it.

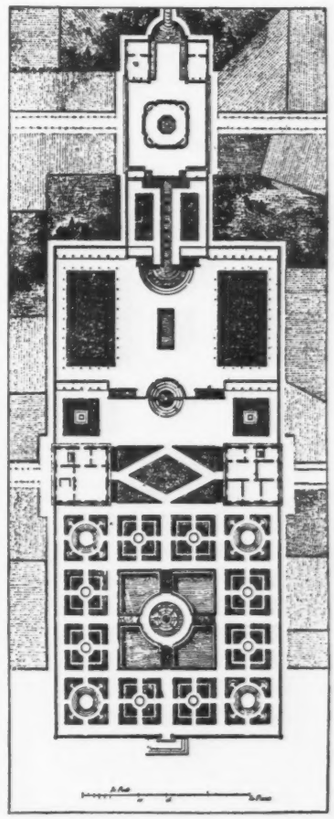
This form of balance often requires the steadying influence of a frame or boundary. In the plan illustrated of a Japanese garden of the Yedo period, on page 246, it is clear that the screen of fencing which defines its limits is an aid to balance rather than a detraction from it. There is a force of opposing movements in this plan which the boundary serves to control.

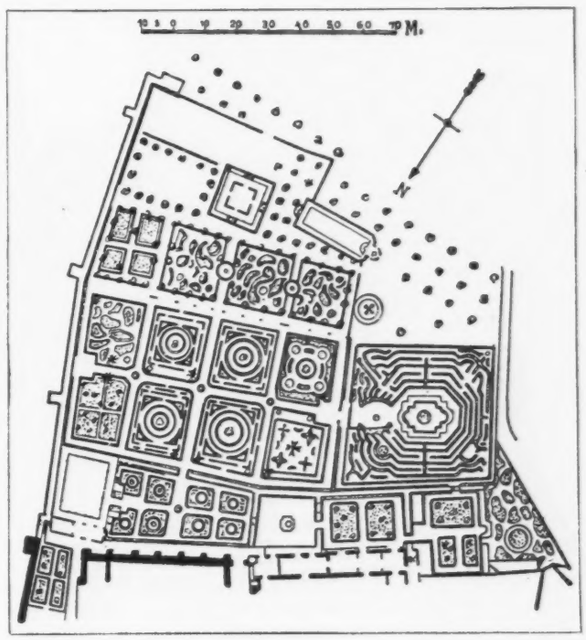
"Occult" balance deserves more investigation than it has so far received from landscape designers if our gardens are to keep pace with modern developments in architecture. It must not be imagined, however, that "occult" balance and asymmetrical compositions in general are being advocated here as having any special merit above the more usual kinds of order and arrangements. Each has its value in a different sphere. The use of asymmetrical principles is being stressed for a good reason. We are searching for a new technique for the contemporary garden, for a garden designed to be a complement of contemporary architecture, which embodies to a large extent the principle of asymmetrical balance. This is not shown by all good modern examples—it would be a loss to architecture if symmetry were frowned on—but it would be neglecting a wide field for experiment to remain content with the old axial and symmetrical conception of garden planning when a form directly in sympathy with modern æsthetic needs is asking to be employed. Neither should it be thought that we are impinging upon the old and vexed question of the architectural garden versus the landscape garden. The asymmetrical technique, essential to the latter, can be applied with equal success to geometrical compositions.

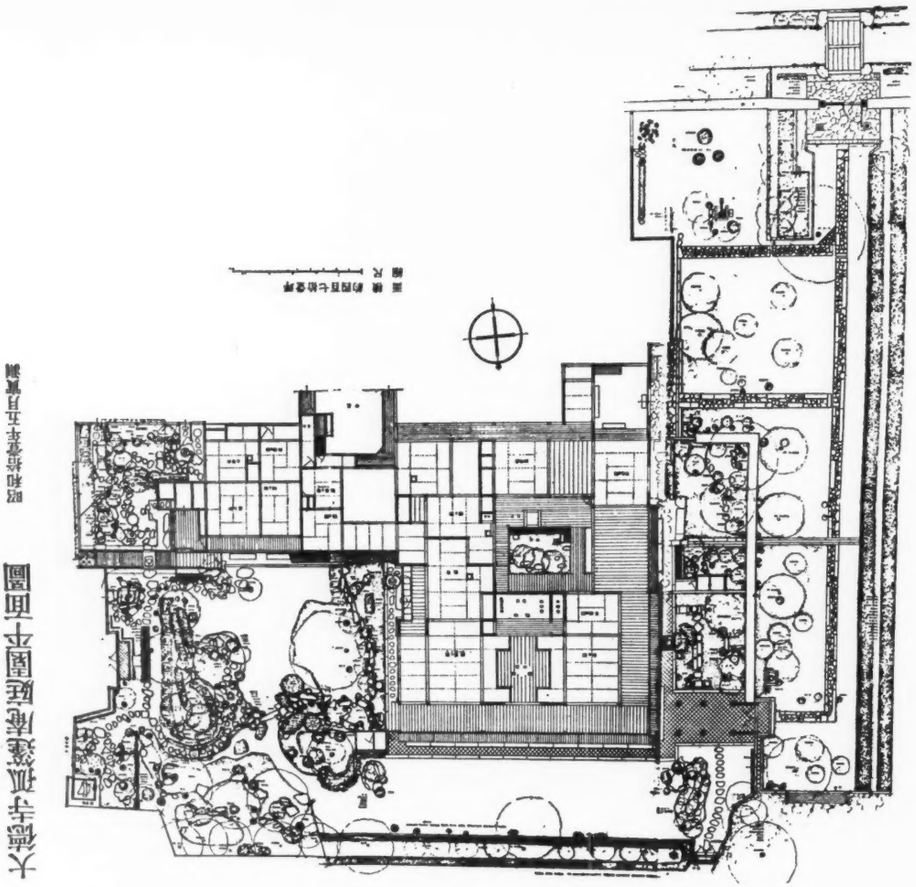
One of the reasons for a Western fondness for symmetry in gardens (we must except the garden art of certain ages) has been the unimaginative use of asymmetrical principles where they have been applied. The landscapists adopted irregularity without giving proper consideration to its necessary complement, texture. This, a sensory quality, and distinct from pattern, which appeals only to the eye, is not necessary in symmetrical garden compositions; in fact, an elaboration of plan may destroy the effectiveness of the design. Texture, or at least some stimulus to the tactile sense, is an essential component of the "landscape" garden, which must always be a three-dimensional construction and have an emotional as well as an intellectual appeal. The appeal of the irregular garden must necessarily lie in its subtlety. Originally, there cannot have been much evidence of this æsthetic factor in the garden made by Le Notre for Louis XIV at Versailles—time has given it the tactile qualities we now admire in it most. The sweep of its terraces and avenues is in the nature of a broad, classical gesture, the product of an age of rationalism.

We seek again a rationalism, but a more evocative expression of it. Our modern buildings are simple statements, but our gardens have a new mission: to fulfil the need for an affinity with nature which Louis never felt and which even Rousseau could not have imagined. In an age which has divorced itself from the life of the soil, we need nature's materials (not her image), her sticks and stones and leaves, the stimulus of her proximity. We like to throw our windows open to the sun and to see it filter into our dwellings through the branches of a neighbouring tree, or to hear rain falling softly on the foliage. We begin (it is only a beginning) to use nature as the Oriental has for centuries, not as a refuge from life but as a sustainer of it. And that is why, in our search for sources of inspiration for a modern

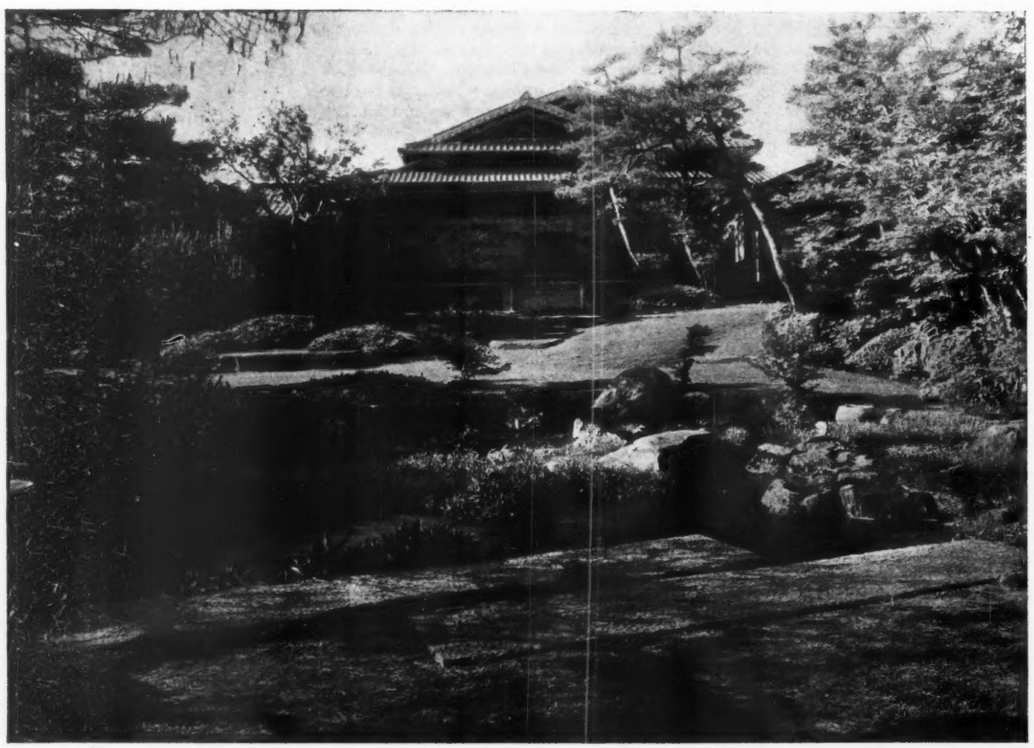
A contrast in garden plans: upper plan, the gardens of the Villa Lante, Bagnaja: Italian axial planning of the 16th century; lower plan, the Alcazar, Seville: occasional symmetry in the parts but not in the whole. A product mainly of the same century.







大德寺孤蓬庵庭園平面圖 昭和拾壹年五月實測



Top, the plan of a Japanese garden of the Yedo period (1603–1867). *Architectural and landscape gardens are here seen in juxtaposition. The many means of access emphasize the close relationship between house and garden, as does the repetition of architectural material out of doors in the form of stones, fences and screens. A complicated pattern, the effect of which is simplified by the economical use of plant material. Bottom, a modern Kyoto garden. Vegetation controlled, but not abused. The trunks of the trees in front of the house have been trained to their present angles and the low azalea bushes to shapes required of them by the rhythm and movement of the composition.*

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This journey should be no mere borrowing expedition, but rather in the nature of Gauguin's to the South Seas or a modern sculptor's imaginary pilgrimage to an African village. There is no need to linger on the Mediterranean seaboard — Gertrude Jekyll brought back a sufficiency of ideas from that quarter—and we can pass by the mystical temple gardens of India. Even China's symbolical landscape gardens with their islands of eternal youth and happiness—scenes which provoked a century of nature-copyism in the West—hold little for us. They are too far removed from our material conception of the universe. It is to the gardens of Kyoto that we must turn, some of them centuries old, but all possessed of a secret which only intimacy with nature can reveal. The individual garden except as an example need be no concern of ours, but an understanding of the principle which lies behind it must be achieved if we are to enlarge our artistic horizon. It should be added that not even a superficial attempt is being made here to explain the Oriental attitude to art in general, and that only a very brief indication is to be given of the Japanese attitude towards garden art in particular.

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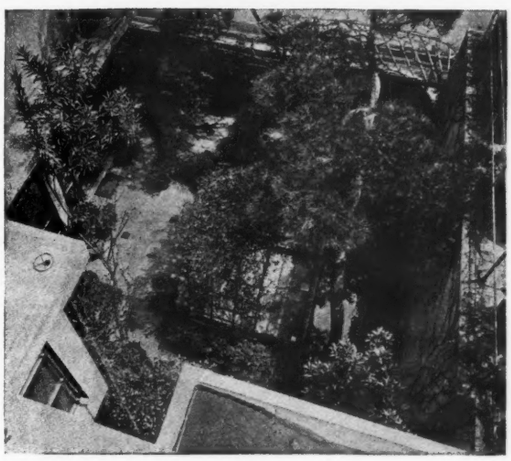
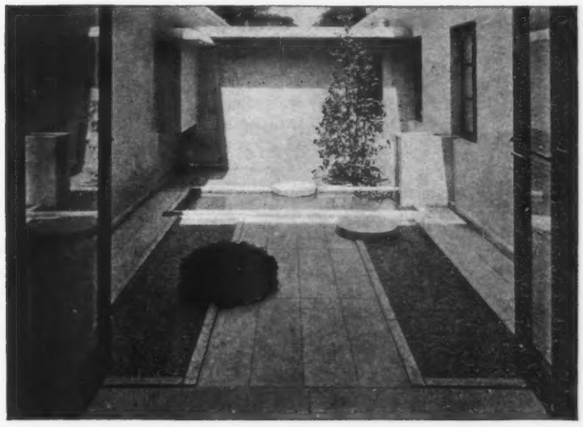
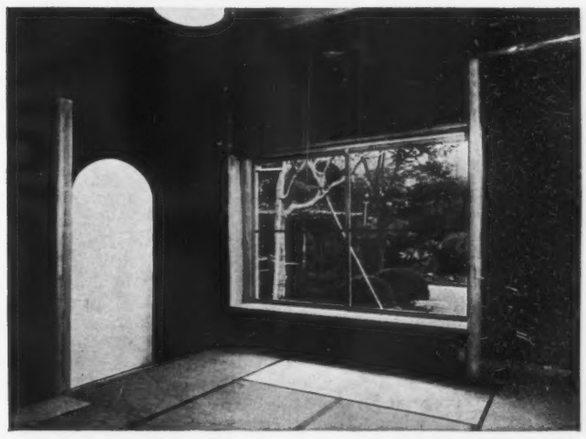
Until recently the little that has been borrowed from Japanese art has been its ornament, in painting, in architecture and in gardening. In gardens, who is not familiar with enthusiastically-conceived imitations of the tea-garden, with their ubiquitous stone lanterns, torii, shrines, and summer-houses? Oddly enough, imitators have seized upon the least important aspect of Japanese art for the exercise of their zeal. It is well known that the excessive use of ornament is an idea repugnant to the Japanese, who choose black or grey material for the roofs of their houses, in contrast to the bright red of the Chinese, and to whom gilded dragons are an exotic fancy. As one modern writer has put it, the Japanese come at the beautiful by way of the necessary. They live in rooms empty of furniture and display their articles of







Japanese principles of garden design have had their influence on the new architecture of the west in which interest is shown in the architectural utilization of plant life. Top left, a concrete loggia in a small garden in Warsaw; A. Schloetzówna, garden architect. Japan itself shows examples of a modern equivalent of her own type of garden. Bottom left, Antonin Raymond's house in Tokio, which continues the tradition of the feudal interior garden. Above, three garden views of a modern Japanese house by Sutemi Horiguti. The interior garden, centre, contains only three plants.

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The phenomenon of Japanese art that should be most significant to modern designers is the feeling for a spiritual quality in inanimate objects, that feeling which makes the Oriental smile at a European painter's efforts to obtain physical likeness and exact perspective. Long before the days of the Impressionists the Japanese artist was painting the iridescent mountain mists and finding in the curve of the rocks and the sweep of a waterfall a sensation akin to that caused by his own aspirations and activities. The waving of a branch in obedience to the wind, the refreshing and purifying flow of a surging stream—these things were significant to the landscape painter and gardener alike and were loved by them as being near to their own experience. There is a parallel in this attitude to some of the more recent manifestations of contemporary thought. Without elaborating the point in too much detail, it may be said that a sense of personal identification with nature and with the flow of the creative forces of the universe is expressive of the beliefs of some of our modern philosophers whose individual and personal mysticism would seem to spring from the same root. For centuries European art has turned its back on the fundamental conception of nature in art, and Western man has imagined himself and nature as being in antithesis. In reality, his much-vaunted individuality is an illusion and the truth which the Orient now reveals to him is that his identity is not separate from nature and his fellow-beings, but is at one with her and them. And until the European has learned to cultivate the empathic attitude and has discovered that apart from the symbolism of the East and behind it is an æsthetic antithetical and complementary to his symmetrical classic conception of composition, the universality of art can never become an accomplished fact.

This conception of nature and natural forms finds one of its expressions in Japan (and is beginning to in Europe) in the unity of the habitation within its environment. This is accomplished in more than one way. Japan has for long had a genius for building. The typical Japanese house is an example of great skill in the use of native materials, the management of space and the distribution of rooms. It differs from, say, the pre-war English house in being almost one with nature. In warm weather the house becomes part of the garden, the sliding paper screens, which keep out the cold blasts and snow of winter, being easily removable so that the whole side of the room may be thrown open to let in the cool summer winds. Since the advent of steel frame construction, that is for the last fifty years, it has been possible to build houses in this way which conform in other respects to European standards but it has not been thought necessary to do so in England until the present time, when, with the advent of the modern house, experiments in this direction are being carried out. The sliding-folding window may help to break down the rigid barrier between house and garden both here and on the Continent, perhaps supplanting the cumbersome and costly device of disappearing windows.

In Japan, another method of achieving the coalescence of a building with its surroundings is the province of the landscape architect. The house walls are echoed by screens placed near them, stone repeats stone on the simple terrace, plants encroach on the walls of the house and wreath themselves among its timbers. Yet

OFFICES

BERTIE CREWE AND KAY

THE SITE Broadwick Street, London. The site was formerly occupied by a motor coach station.

PLANNING The planning requirements called for a large well-lit building, with floors suitable for office letting. A central entrance has been provided from Broadwick Street and a loading and unloading dock, accessible from a side street. The remainder of the floors are left as open space interrupted only by the structural columns. This space will be subdivided according to the individual requirements of the tenants, who have been invited to consult the architects in planning their offices.

STRUCTURE AND MATERIALS The structure is steel-framed with concrete floors, with brick infilling for the external walls.

EQUIPMENT AND FINISHES There are two lifts : one passenger and one goods lift. Electric light, power, gas and telephone are provided for each floor. The building is protected against fire by two independent sprinkler systems and a dry hydrant riser for each floor; a number of hand appliances have also been provided.

THE VIEWS ILLUSTRATED 1, the Broadwick Street elevation. 2, a detail of the main entrance. 3, the entrance hall.

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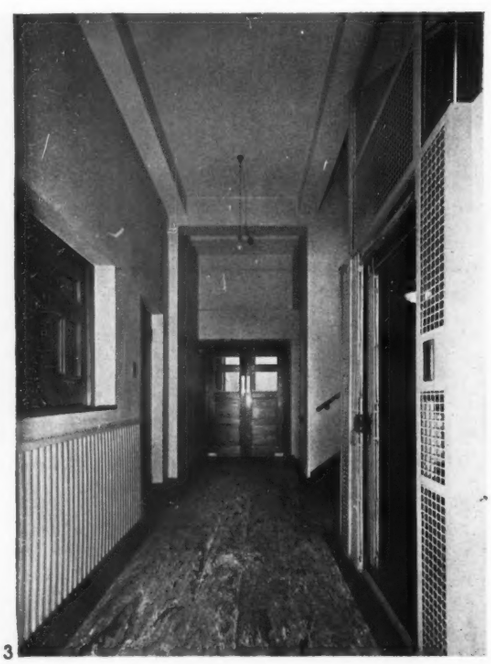

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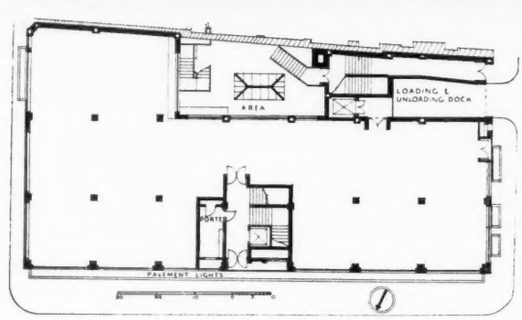


GROUND FLOOR PLAN

ASYMMETRICAL GARDEN PLANNING

THE ORIENTAL AESTHETIC

By Christopher Tunnard

So-called "formal" gardens, in which planning has not been influenced by the existence of natural phenomena or the exigencies of use (architect-designed caprices of the academies) are usually symmetrically planned. This has not always been so; in the Middle Ages the unsymmetrical garden, "that strange and recondite set of fancies," was often the accompaniment of the feudal dwelling. Evelyn was the first Englishman to use the word "asymmetry"—he was discussing the town planning of London—but in his writings also occur the first mention of the words "vista" and "canal," those essential characteristics of the axial, symmetrical gardens of the *Grand Siècle*. In spite of the intervening occurrence of the landscape garden (which significantly arrived from China on a porcelain vase by way of Tivoli and Cooper's Hill) symmetrical planning returned with the Italianate revival in the nineteenth century. Only today, with the death of the culture which lauded the axial vista, that most snobbish of all forms of Renaissance planning, has the cult of symmetry begun to suffer a deserved eclipse.

If we analyze designs of most gardens planned on the axial system, we find that the common practice is to make the right side of the plan repeat the left; that is, right and left balance on a vertical axis. This is called "inversion" and is the most usual form of symmetry employed in gardens.

Towards the end of the last century there was a breaking-away from the stocking of symmetrically-arranged groups of beds with plants placed in rows and geometrical patterns—carpet-bedding and bedding-out. One or two designers declared that the stiff lines of the borders produced a sufficiently "formal" effect to warrant what they called a more natural type of planting; thus herbaceous borders came into being, and one occasionally saw an old box-edged garden being planted with shrubs, herbs and colonies of bulbs. Planting became asymmetrical, but the layout of this type of garden has remained in the old state. One might go so far as to say that ninety per cent. of so-called "formal" gardens are created on this rule, which has been, and probably will continue to be, an eminently safe one for any cautious designer to follow.

The remaining ten per cent. of "formal" designs are based on the system of double inversion, or balance on a diagonal axis. Such plans resolve themselves into states of single inversion if viewed from certain angles, but where this form of balance is consciously used care is taken that the effect of diagonal balance shall be apparent where it is needed. Such designs are not symmetrical, but are nevertheless well balanced, although more delicately than those which rely on a vertical axis. Their æsthetic appeal lies indeed in the fact that their special form of balance is less easily recognized.

The next step, taking us still further from symmetry, and into a new field of conscious exploration, reveals the existence of a form of balance which has been termed "occult." It is essentially a relative quality depending on the interplay of background and foreground, height and depth, motion and rest, but as such it can be reduced to a science and obtains through all composition in art and nature. Primitive peoples have always been responsive to its urge. The native whose scanty attire consists of a flower placed over the right or left ear, is relying on the artistic effectiveness of asymmetry against a strictly symmetrical background (what more obvious example of symmetry than the human face?) an arrangement which does not destroy balance but serves to accentuate it.

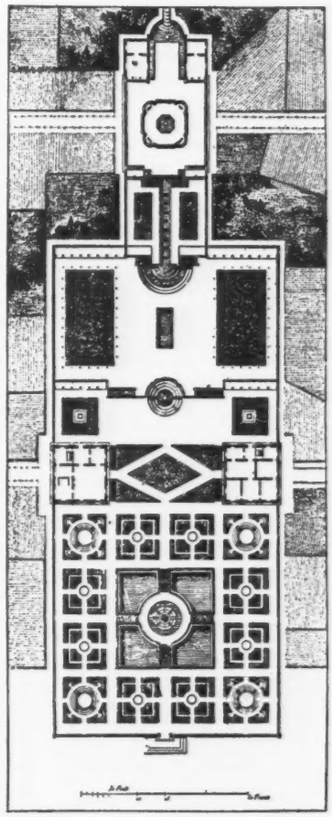
This form of balance often requires the steadying influence of a frame or boundary. In the plan illustrated of a Japanese garden of the Yedo period, on page 246, it is clear that the screen of fencing which defines its limits is an aid to balance rather than a detraction from it. There is a force of opposing movements in this plan which the boundary serves to control.

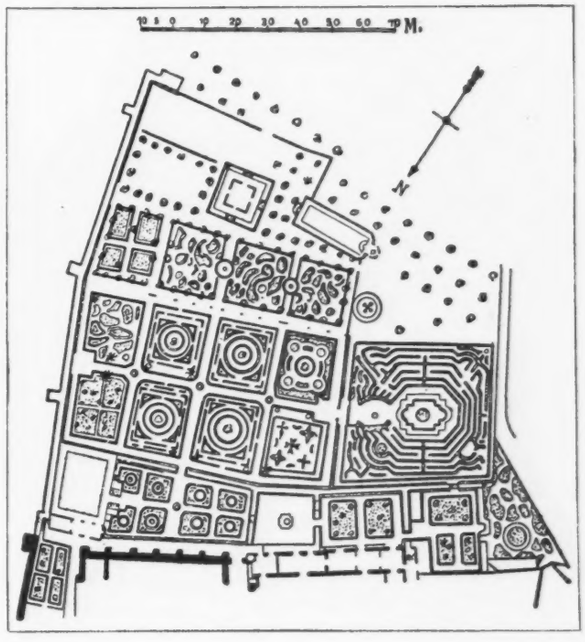
"Occult" balance deserves more investigation than it has so far received from landscape designers if our gardens are to keep pace with modern developments in architecture. It must not be imagined, however, that "occult" balance and asymmetrical compositions in general are being advocated here as having any special merit above the more usual kinds of order and arrangements. Each has its value in a different sphere. The use of asymmetrical principles is being stressed for a good reason. We are searching for a new technique for the contemporary garden, for a garden designed to be a complement of contemporary architecture, which embodies to a large extent the principle of asymmetrical balance. This is not shown by all good modern examples—it would be a loss to architecture if symmetry were frowned on—but it would be neglecting a wide field for experiment to remain content with the old axial and symmetrical conception of garden planning when a form directly in sympathy with modern æsthetic needs is asking to be employed. Neither should it be thought that we are impinging upon the old and vexed question of the architectural garden versus the landscape garden. The asymmetrical technique, essential to the latter, can be applied with equal success to geometrical compositions.

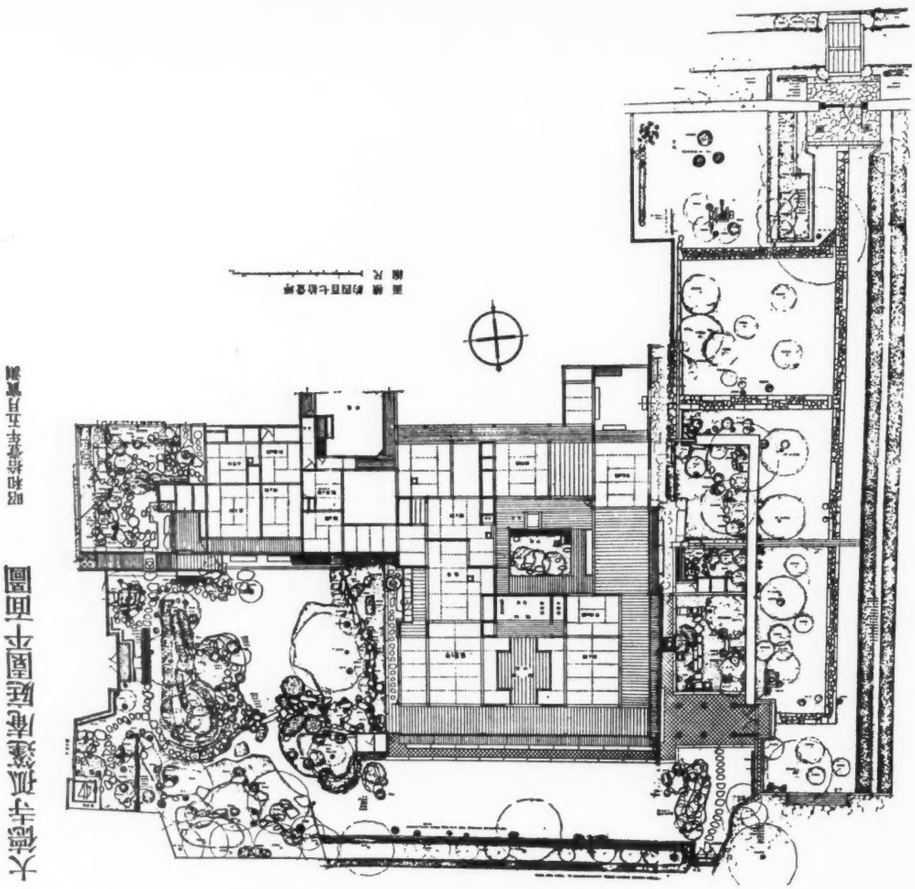
One of the reasons for a Western fondness for symmetry in gardens (we must except the garden art of certain ages) has been the unimaginative use of asymmetrical principles where they have been applied. The landscapists adopted irregularity without giving proper consideration to its necessary complement, texture. This, a sensory quality, and distinct from pattern, which appeals only to the eye, is not necessary in symmetrical garden compositions; in fact, an elaboration of plan may destroy the effectiveness of the design. Texture, or at least some stimulus to the tactile sense, is an essential component of the "landscape" garden, which must always be a three-dimensional construction and have an emotional as well as an intellectual appeal. The appeal of the irregular garden must necessarily lie in its subtlety. Originally, there cannot have been much evidence of this æsthetic factor in the garden made by Le Notre for Louis XIV at Versailles—time has given it the tactile qualities we now admire in it most. The sweep of its terraces and avenues is in the nature of a broad, classical gesture, the product of an age of rationalism.

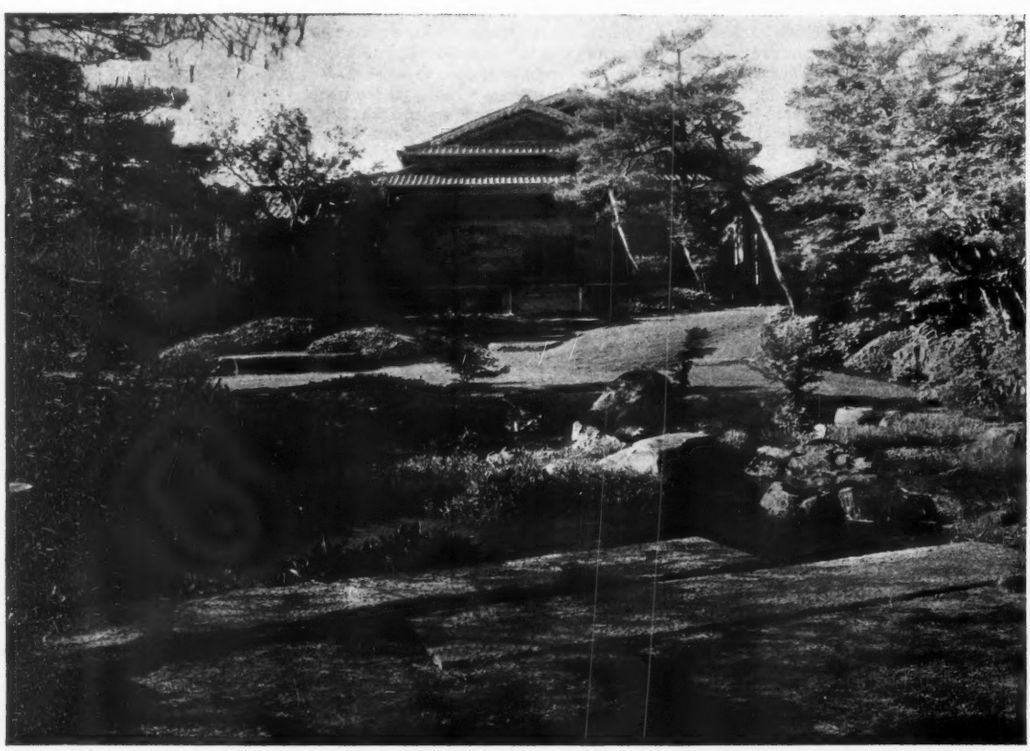
We seek again a rationalism, but a more evocative expression of it. Our modern buildings are simple statements, but our gardens have a new mission: to fulfil the need for an affinity with nature which Louis never felt and which even Rousseau could not have imagined. In an age which has divorced itself from the life of the soil, we need nature's materials (not her image), her sticks and stones and leaves, the stimulus of her proximity. We like to throw our windows open to the sun and to see it filter into our dwellings through the branches of a neighbouring tree, or to hear rain falling softly on the foliage. We begin (it is only a beginning) to use nature as the Oriental has for centuries, not as a refuge from life but as a sustainer of it. And that is why, in our search for sources of inspiration for a modern

A contrast in garden plans: upper plan, the gardens of the Villa Lante, Bagnaja: Italian axial planning of the 16th century; lower plan, the Alcazar, Seville: occasional symmetry in the parts but not in the whole. A product mainly of the same century.









Top, the plan of a Japanese garden of the Yedo period (1603–1867). *Architectural and landscape gardens are here seen in juxtaposition. The many means of access emphasize the close relationship between house and garden, as does the repetition of architectural material out of doors in the form of stones, fences and screens. A complicated pattern, the effect of which is simplified by the economical use of plant material. Bottom, a modern Kyoto garden. Vegetation controlled, but not abused. The trunks of the trees in front of the house have been trained to their present angles and the low azalea bushes to shapes required of them by the rhythm and movement of the composition.*

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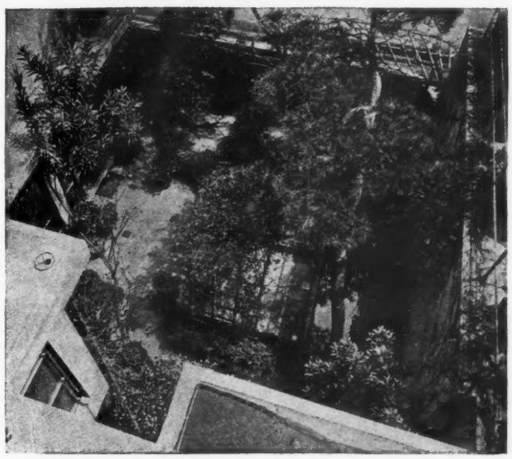

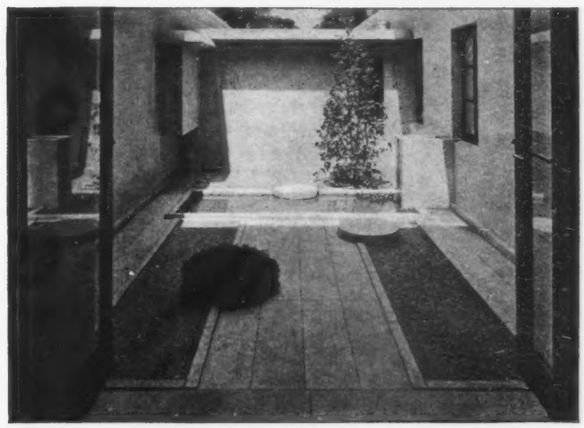

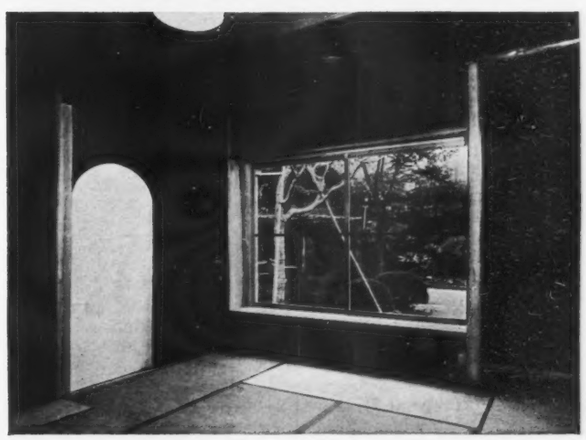

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In Japan, another method of achieving the coalescence of a building with its surroundings is the province of the landscape architect. The house walls are echoed by screens placed near them, stone repeats stone on the simple terrace, plants encroach on the walls of the house and wreath themselves among its timbers. Yet

all is restrained, calculated and under control. No great waves of vegetation beat upon the building; man shows his respect for nature by allowing her admission to his scheme of planning, but sees to it that the respect is mutual. He permits no uncalled-for display of exuberance. In return, he does not exploit his plant material. The chief criticism which a Japanese has to make of our

The familiar English attempt to adopt garden ideas from Japan is the "period" Japanese tea-garden fashionable during the second half of last century. Above, a wistaria arbour and tea house on the lawn at Bagshot Park. Below, in contrast, a modern garden in Leicestershire which adopts an æsthetic principle from the Japanese instead of merely borrowing the superficial style. Water, stones and planting are linked intelligibly to the small pavilion.

European gardens is against what seems to him the barbaric massing of colour to be found everywhere. As has been truly said, until recently we have regarded the grouping of colours as one of the most sublime of human arts. Now, while the trend in all art is slowly moving towards an acceptance of form, line and economy of material as being of first importance, some of our gardens are beginning to show signs of this change of view. In Japan, colour in gardens is used sparingly and backgrounds are always studied closely. Extreme simplicity of effect is sought. The grouping and arrangement of plants is of far greater importance than the colour of their flowers. Endless trouble is taken in the training of trees, especially the favourite pine, so that their shapes may gain a particular character which is necessary to emphasize some special effect. Many gardens may be almost without flowers, yet full of interest provided by the variety of the shapes of the trees, their arrangement, the grouping of shrubs, shadows, reflections in the water, and other subtleties evoking in the onlooker sensory and intellectual pleasures such as a lavish display of colour in itself could never arouse.

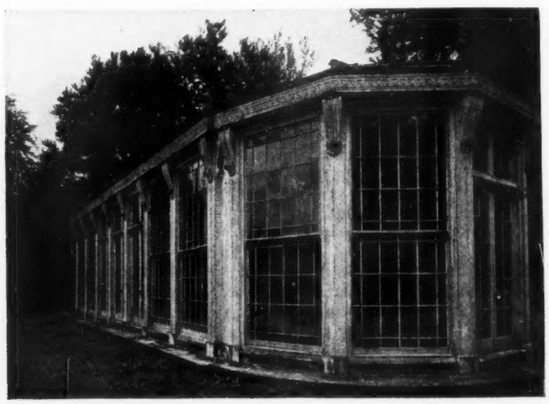
To create this atmosphere their feeling for inanimate nature has made the Japanese supreme in such matters as the placing of stones, the management of contour lines and the use of water. Eleven centuries of practice in the art have not dulled perception, and some of the newest gardens are of the greatest refinement and subtlety. They are as different from the originally imported naturalistic gardens of the Chinese T'ang period as art can make them. Except in rare cases there is no attempt made to imitate natural scenes either in miniature or on a life-size scale, a popular and quite erroneous impression of Japanese gardens current in the West. All the important gardens are products of a highly stylized art in which experiment is encouraged and conventional repetition avoided.

When the sentimental, superficial approach to this Oriental art through its merely decorative aspects has been abandoned by the Western mind it will be discovered that the underlying principles may very well serve as part of the basis for a modern technique. Obviously, our own must be founded on broader considerations, since it is governed by other factors. In general, the Oriental likes to enjoy his garden sitting down—our habit of "going for a walk" does not in the least recommend itself to him as a method of appreciating its qualities. Our own gardens are planned for rest and recreation, not for purely meditative purposes, and it is necessary to arrange them so that they are pleasant to live in as well as to look at. In all spheres of modern art creation is increasingly demanding identification with the social problem, and garden art, though at present sadly retrograde in this respect, must soon embrace the communal idea or cease to function as an integral part of modern life. But the new technique, as we have seen, demands many of the special qualities which make the fundamentals of Japanese landscape art significant as a modern example. The appreciation of form and texture which combine to create unity between architecture and its surroundings is not the least of these qualities. We have not yet learned to apply it successfully in the West. The Japanese grasp of rhythm and accent in plant arrangements far excels our own, as does the marshalling of detail into significant and relevant patterns. It is the æsthetic conception which is the foundation of this virtuosity that must be allowed to seep into our artistic consciousness. Let us absorb the Oriental æsthetic. By doing so we shall help to rid ourselves of individualism in art and gain identity with art and life.

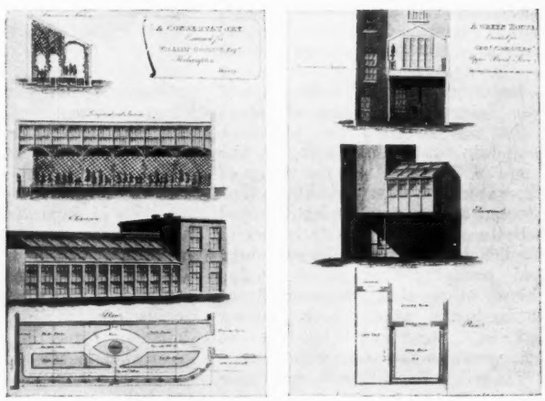
CONSERVATORIES AND PLANT HOUSES

A CHRONOLOGICAL SUMMARY

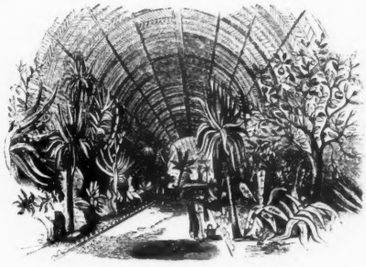
17TH CENT. ***The forerunner of the conservatory was the orangery which, though partly an architectural innovation, initiated the idea of growing plants from warmer climates in sheltered conditions. The famous orangery at Kensington Palace, designed by Sir Christopher Wren.***



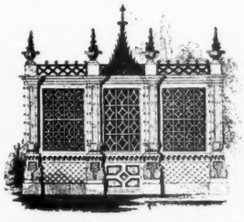
LATE 18TH CENT. ***The beginning of the glass-house, though it is still conventionally architectural in treatment. The conservatory at Claremont, Surrey, constructed in wood.***

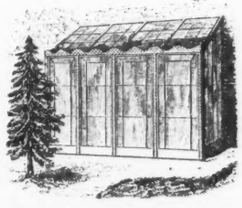


EARLY 19TH CENT. ***The nineteenth century saw the real blossoming of the conservatory, as a result of the interest in cultivating exotic plants. Every kind of house had its conservatory or greenhouse attached, and these two patterns, of one suitable for a country villa and one for a house in Mayfair, are given in a book by George Tod dated 1807.***

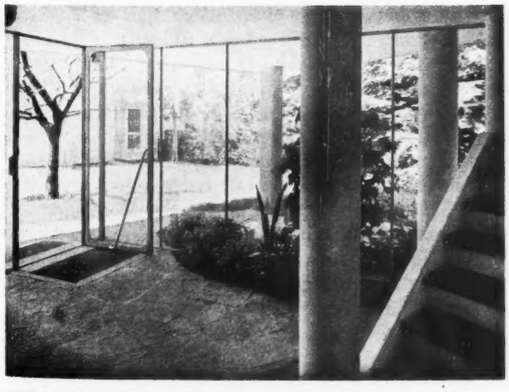


EARLY 19TH CENT. *A type of building, allied to the conservatory, which reached the climax of its development in the nineteenth century was the great glass palm house or arboretum, whose importance as a field for engineering experiment and whose influence on modern design is well known. Above, the palm house at Bretton Hall, Yorkshire, built in 1827, and the interior of Paxton's famous Great Conservatory at Chatsworth.*





LATE 19TH CENT. *Meanwhile the domestic-scale conservatory was evolving in every direction from the exotic to the severely practical, the latter often having also its own style of elegance. Two specimens from Hibberd's "Rustic Adornments for Homes of Taste."*



TODAY *Since the nineteenth century the conventional greenhouse showed little architectural distinction until modern architects began to utilize planting in architectural design. This tendency produced the modern equivalent of the conservatory, the flower-window or glass-walled room containing decorative planting. An entrance hall to a block of flats in Zurich, by A. and E. Roth and Marcel Breuer.*

Humphry Repton at Blaize Castle

By John Steegmann

IF we rub up our Jane Austen, take down *Northanger Abbey* and turn to Chapter XI, we find that the drive from Bath to Bristol which Catherine Morland projected to take with the Tilneys and Mr. Thorpe was to have included dinner at Clifton and, if time permitted, a visit to King's Weston and Blaize Castle. Catherine visualized Blaize as something more romantic than *Udolpho* and larger than Berkeley, with turrets and towers, lofty and decaying rooms, grated doors and narrow, winding vaults. Fortunately for her, the expedition never came off; what with a late start, and the poor performance of Thorpe's horse, which only did seven miles an hour instead of its expected ten, they only got as far as Keynsham. Had they got to Blaize, Miss Morland would have been greatly disappointed; probably not even the view would have been good enough, for her fashionable and sophisticated ideas about the Picturesque were not formed till Chapter XIV.

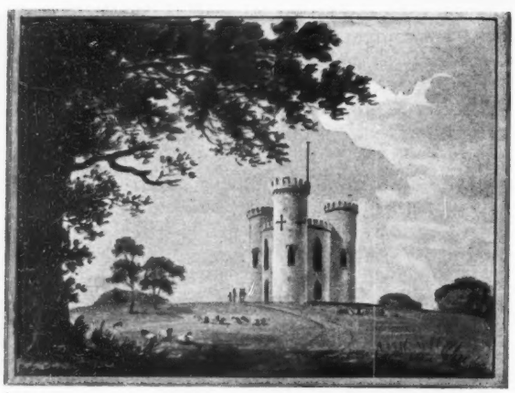
Northanger Abbey was finished in 1803 and begun in 1798. At that time Blaize Castle must have looked much as it does today. The estate lies in the parish of Henbury, near Westbury-on-Trym, across the Downs from Clifton, and was bought about 1760 by a Bristol merchant called Thomas Farr* who changed its name from the Great House, Henbury† to Blaize Castle, deriving it presumably from a local Chapel of St. Blasius. Then, as now, the two salient features were a thickly-wooded gorge and a lofty mound or eminence commanding a magnificent view over the gorge and the Bristol Channel in the distance. On the top of this mound Farr built a tower on a triangular plan, surmounted by turrets at the three corners, which is seen in 1 as it still is. This is Blaize Castle. Miss Dunman, of The Bristol Museum and Art Gallery, is of the opinion that Farr's architect was Robert Mylne [1734–1811], which is borne out by the A.P.S. Dictionary of Architecture giving 1765 as the date for work by Mylne at King's Weston and Blaize. In 1789 the estate was bought by John Scandrett Harford, and it remained in the possession of the Harford family until about ten years ago, when it was bought by the Corporation of Bristol for a public park.

Harford, having bought a view and a Gothic tower, wanted a house in which he could live and from which he could walk or drive up to the one to enjoy the other. Building a house entailed improving its immediate surroundings and, since Lancelot Brown was dead, there was only one man in England who could be called in and that was Humphry Repton.

Repton visited the place in the autumn of 1795, and delivered his plans in the form of his usual MS. Red-Book,‡ with water-colour drawings that have moveable slides, in February 1796. This Red-Book is now in the possession of the Bristol Museum and Art Gallery, having been acquired from a former

* Bristol and Gloucestershire Arch. Soc. Trans.
† Views in Kip and Atkyns "Gloucestershire," 1712.
‡ C.f. Red-Book dealing with Bayham Abbey, described in THE ARCHITECTURAL REVIEW for November 1936.

1



2

1, Robert Mylne's triangular castle at Blaize, built at the end of the eighteenth century and, 2, Repton's suggested improvement, with one tower made slightly higher than the other two in order to exaggerate its effect in perspective. 3, Repton's drawing of Paty's house and orangery and, 4, the same as it is today, with a connecting wing added.

3

4

gardener at Blaize, to whom it had been given by a member of the Harford family.

Repton's remarks about the improvement of Blaize are arranged, with a short Introduction, under the headings of Situation, Character, Approach, The House, The View, The Cottage, Walks and Drives, and The Water.

As at Bayham Abbey, in 1799, he had to select a site for the house in relation to a view. At Bayham the view was to be had from the house itself and his choice of site was therefore limited; but at Blaize the view had to be walked to, and his choice of site was really only governed by accessibility. While the view at Bayham was one along a level and watered valley, with a ruin at the end, that at Blaize was a prospect, to be seen from a height. The house and the view could not be combined in one site, for Repton shared Lancelot Brown's aversion to a house on the summit of a hill, and observes that " however sublime as an occasional spot to be visited, it must be wholly inapplicable to a family residence."

The problem of Situation was fairly easy. That of Character was more complicated. To begin with, the village of Henbury already contained " a number of villas and large country houses [which] seem to dispute with each other by their size and cumbrous importance " : these of course include King's Weston. An additional difficulty lay in the name of Blaize Castle, for " the house ought not to partake of the castle-character." A battlemented castle was perfectly fitting for Lord Camden, but one suspects that Repton thought it unsuitable for a Bristol merchant. Plain, solid, conventional Grecian would be much more in keeping, especially as the house, though " so near to the largest City in England except London and in the neighbourhood of the most frequented watering-place in the Kingdom " (is this Bath, or has Clifton already taken its place?) was to be a family residence and not a villa. And so, by cordial agreement between Repton and the architect, " Mr. Patty,"* the house was designed as in 3. 4 shows it as it is today, from the same view. The porticoed wing connecting the main block with the orangery is a later addition. The problem of the Castle association was to be solved by a lodge which by its Gothic character would serve as an introduction to Mylne's tower on the hill.

The section on The View contains a minor axiom of the landscape gardener's art, that " the landscape from an eating-room is of less consequence than any other," which, considering that dinner was then taken by daylight, except for a few weeks in mid-winter, shows a sound respect for the table. It also contains some remarks on accent and emphasis in the rhythm of the natural scene, urging the removal of the white rail-fence (shown in his sketch, 5), " which catches the eye and prevents it seeing anything but itself " and the lopping-off of branches or tree-tops where they intrude disproportionately into the general arrangement; Repton here quotes from some of his own verses :

" Nor let the axe its beak, the saw its tooth,
Refrain whene'er some random branch has strayed
Beyond the bounds of beauty . . . "

In addition to minimizing over-emphasis, he proposes to place an accent where it is badly needed, in the form of a picturesque cottage, for which 7 is his design, that " will give an air of cheerfulness and inhabitancy to the scene which would without it be too sombre." Inhabitancy is an important

* W. Paty, active in Bristol before 1775 and after 1795.

ingredient in a scene which, while close to a great city, is yet somewhat Sublime, and this quality would not be provided by a temple or a pavilion.

It is characteristic of Repton's thoroughness and ability to think all round each of his ideas that he foresees " that it will frequently happen in a summer's evening that the smoke from this cottage will spread a thin veil along the glen and produce a kind of vapoury repose over the opposite wood," as in 6, so that the valley will seem wider than it really is. The cottage itself must " partake of the wildness of the scenery without meanness " and must look like what, in fact, it is : the habitation of a labourer but the property of his master. This involves a return to the Shenstonian conception of Ideas in a garden, the idea in this case being " *la simplicité soignée*," a simplicity that is the effect of Art and not of accident.

Discussing the walks up to and around the castle itself, Repton insists on a small lawn " which surprises by its unexpected contrast with the other wild part." This remains today, and is extremely effective. But he also effects an improvement on his predecessor's Tower for, " though its form is not correctly Gothic, it would give more the character of a real castle at a distance if one of the round towers [turrets] were elevated above the other two." This improvement is illustrated in his sketch, 2.

The Water, which is the subject of his last section, is no less than the Bristol Channel seen in the distance, and Repton severely condemns the last owner's attempts to make an artificially-induced torrent in the bed of a glen which is naturally dry but for a thin and muddy trickle; his reason for condemning it is not reluctance to change the character of the place but simply that this could not be done without mechanical means and " all the horror of fire and steam and the clangour of iron chains and forcing-pumps."

Repton and Paty were fortunate in their patron, for Mr. Harford seems to have carried out all their designs; nor, except for certain additions to the house, have they been materially altered since then. Except that it is public and no longer private property, Blaize is still as Catherine Morland would have seen it had Mr. Thorpe ever got her over there.

Immediately adjacent to the estate is a small close, with several cottages, one of which is shown in 8. It is a signed and dated piece, for an inscription records that it was built by John Nash in 1811.

8

5, and 6, the same view before and after " improvement." 7, a closer view of the cottage seen in 6, embodying the idea of " la simplicité soignée :" all from Repton's note-book, in which he outlines his proposals for Blaize Castle. 8, part of Nash's picturesque hamlet attached to the estate, as it appears today.

5

6

7

Book of the Month

The End of an Epoch

By Osbert Lancaster

VIENNA. By Edward Crankshaw. London : Macmillan & Co. Price 8s. 6d.

ONE of the most striking if paradoxical phenomena of modern civilization is the disappearance of the city. There are towns and there are villages, but the city with a culture, a tradition and a life of its own is nowadays hardly to be found : with every extra acre of bricks and mortar something of its individuality and communal life is sacrificed. In the case of London, which ceased to be a city in the fullest sense of the word at the beginning of the nineteenth century, the rapid rate of expansion coupled with a national preference for living in the country and working in the town produced this deplorable result more quickly and more completely than elsewhere. Berlin passed straight from being a town to being a modern metropolis and so skipped the city stage altogether. In Paris a city-culture of a sort has survived a century of revolutions and an invasion of American

intellectuals, but this survival has been weakened by a tendency to confine itself to certain quarters, the strongholds of mutually exclusive communities. Almost alone among the great cities of the modern world Vienna until yesterday still remained, to a very large extent, a self-sufficient cultural unit.

This splendid isolation was due to a variety of causes; to the siege by the Turks, coming so late in its history, which led to the retention of the city walls, the natural barriers to unchecked expansion, far longer than elsewhere; to the autocratic and illiberal tradition of Metternich which, however deplorable it may have seemed to the democratic statesmen of other countries, did discourage many of the less attractive developments of capitalist enterprise; but above all to that national feeling first discernible in the eighteenth century, that Vienna was the capital of a doomed Empire and its future could never be a cause for anything but uneasy speculation, which later was crystallized in the phrase "the situation is hopeless but never serious." This fundamental if unexpressed and frequently unrealized pessimism led to the adoption of an attitude that was reactionary in the fullest sense of that much misused term; a conservatism that clung to the old, and opposed the new gods after which other cities chased, from a firm and well justified conviction that in the case of the Dual Monarchy any change must always be for the worse.

The resulting culture was therefore singularly complete and compact; the *Rosenkavalier*, that masterpiece of Ritz eighteenth century, as Mr. Sitwell has called it, for all its period trimmings mirrors a dying society no less surely than does *Figaro*, and moreover in musical terms that are the final and natural development of the tradition that started with Mozart. Likewise the nineteenth century buildings on the Ring, whether Gothic like the *Rathaus* or neo-Greek like the Parliament, in their feeling for theatrical effect are the product of the Baroque tradition less directly but no less certainly than those parts of the Hofburg which were built at the same time from long lost plans of Fischer von Erlach. It has been said of London that in no other city are the old and the new so inextricably and vitally mingled; that nowhere else does the past so frequently condition the present. But in Vienna the present has no existence of its own at all; since 1814 the city has been living in a prolonged extension of the eighteenth century twilight and all efforts to achieve contemporaneity have been doomed to speedy failure. The past has always proved too strong and it is not inappropriate that the *Karl Marx Hof*, one of the first great achievements of twentieth century architecture, should have been the target of the howitzers of Dollfuss, the peasant, the Catholic, the traditionalist.

In an admirably produced and illustrated volume Mr. Crankshaw has traced the course, one cannot say the rise and fall, of this curious but magnificent culture in a form that is half history, half guidebook, bound together with a thread of frequently shrewd if occasionally a trifle chatty philosophizing. The best things in the book are an excellent short history of the House of Hapsburg, the Atridae of the modern world, an admirable summary of the aims of the great Baroque architects and the means they employed to achieve them (although he makes one sweeping assertion: "it is impossible to see Italian Baroque, no matter how much we may value it, as anything other than the expression of decadence," with which not everyone will be found to agree and which would surely make the late Geoffrey Scott turn in his grave) and a great many descriptions of buildings, particularly those of the *Karlskirche* and the *Stefansdom*, in which the author achieves a measure of success and a degree of sympathetic understanding rare in that difficult department of literature.

And now the doom, so long foreseen, has at length overtaken the city of the German Cæsars; finis has been written beneath the last line of that protracted crime story which Frederick began in 1742. For all its decay and misfortunes Vienna retained until last month some faint flicker of life, but from now on it can only enjoy an existence similar to that of Venice, deriving a faint travesty of vitality from visiting good-timers and the busy manœuvrings of totalitarian uniforms.

But the question remains—was that curious defeatism which has coloured the whole culture of Vienna and found its ultimate expression in Schuschnigg's "*Ich bin fertig, meine Herren*" the result of a clear-sightedness which we lacked; were the Viennese wiser in their generation than the children of light and is the history of their city that of Western civilization in miniature? "In order that Frederick might rob a neighbour he had sworn to defend, black men fought upon the coasts of Coromandel and red men by the shores of the great lakes of North America"; when his successor swallows that same neighbour whole no finger is anywhere raised in protest. Can it be that we too, like the Viennese, are past caring?

The New Specification

SPECIFICATION, 1938. Edited by F. R. S. Yorke. London: The Architectural Press. Price 10s. 6d.

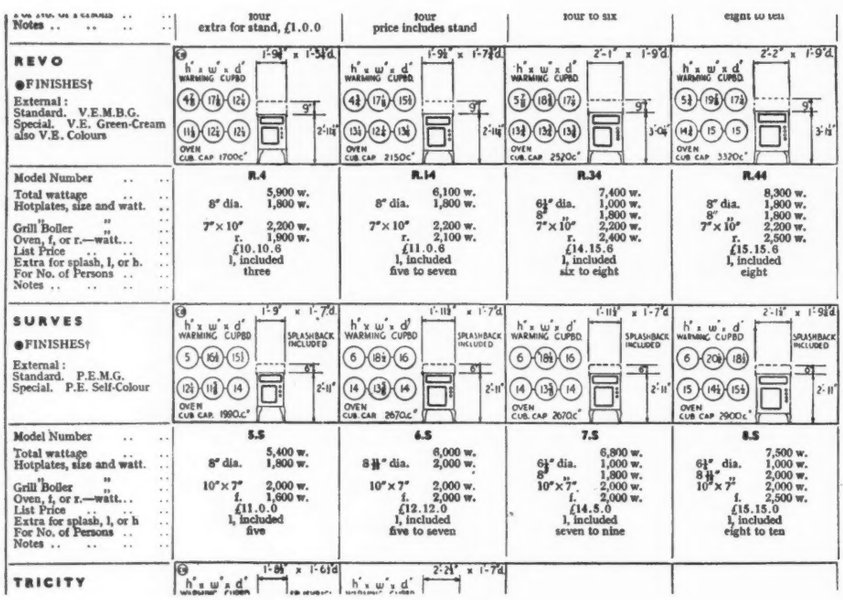
WHILE some designers may regret that architecture is becoming more and more a science (and by inference less and less an art) there is little that the editor or the publishers of a book such as this can do about it. The information is needed and it must therefore be given, and in as convenient a form as possible, or else the book will become so big that it defeats its purpose. The technique, therefore, of a maximum of information in a minimum of space is the only one to adopt, and it has this year been carried further than before, tables and short descriptive notes taking the place of articles dealing with each individual product, so that easy reference is possible and the main features of each material can be conveniently compared.

Yet in spite of this slimming process the 1938 edition of *Specification* has nearly 100 pages more than last year, for a new "Asphalter" section has been added and six other sections have been drastically revised, the electrical section, in particular, having several pages of very useful tables giving overall sizes and other essential data of finishes and construction for cookers and refrigerators, the products of no less than sixteen refrigerator firms being dealt with completely in only four pages—a triumph of logical compression.

Proprietary materials are dealt with in short notes under the appropriate trade headings, but for many of them it is impossible to give all the essential information in a reasonably small compass and the manufacturers have once more been encouraged to make their advertisements as informative as possible—the ideal of course being a page which amplifies what has been said elsewhere or which gives working details and suggestions for use in different situations, so that the architect can see at a glance how it all works. While the advantages of a method such as this are immediately obvious to the designer, who is in search of information and does not want propaganda, it cannot have been at all easy to persuade manufacturers to forgo the pleasure of making a splash and to confine themselves to statements of fact. Compared with last year, however, a good many more manufacturers have been persuaded to see the light, and have produced advertisements which are genuinely useful additions to the editorial pages.

An annual publication is only worth buying if each successive edition is quite a lot better than the one before: *Specification* passes this test, and is an excellent way of bridging the gap between the constructional text books and the weekly periodicals.

PHILIP SCHOLBERG



A special feature of this year's "Specification" is the tabulated information on cookers and refrigerators, giving overall sizes and other essential data of finishes and construction. A section of one of these pages is shown above.

DECORATION

MAY 1938

1

2

3

Metal garden seats designed by Jean Royère, exhibited in different pavilions in the Paris 1937 Exhibition: 1, in the "Centre Rural," 2, in the Ceramic Pavillon, and 3, in the "Pavillon des Artistes Decorateurs." The seats and backs are in perforated sheet steel lacquered lemon colour: the frames light green.

ACOUSTIC MATERIALS IN

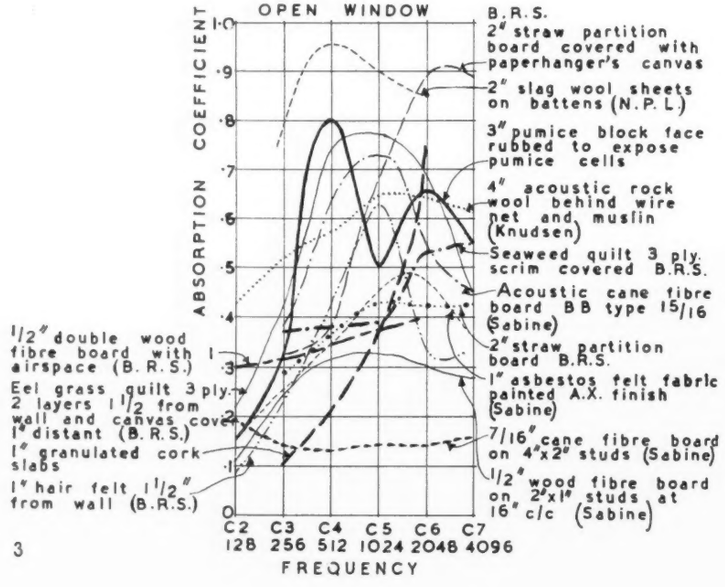
1

2

ONE aspect of acoustics in relation to interior decoration was considered in last month's issue, namely the influence of acoustic forms on the interior. Another aspect is the effect of acoustic materials, which often combine with the former to produce typical decorative forms, as in the case of the platform in the council room of the Overseas Club in Park Place, St. James' Street, London, 1, with its hard plaster reflector and surrounding absorbent board. 2, shows an interior, a film studio theatre at Denham, in which the acoustic material lining the walls, namely an absorbent net protecting a rock-wool surface behind, is almost entirely responsible for the decorative effect of the interior.

A selection of acoustic materials in current use are shown on the following pages; materials which have been specially designed for purposes of sound absorption and whose value can be determined scientifically. (3, shows graphically the result of laboratory tests on various specimens.)

But it is important to bear in mind that apart from these special materials there are other, more traditional, ones (curtains, upholstery, carpeting, etc.) which have a real absorbent value, while there are less determinate factors, such as the people in the audience, who sometimes provide the most efficient area of absorbent in the interior.


OPEN WINDOW
ABSORPTION COEFFICIENT
1·0
·9
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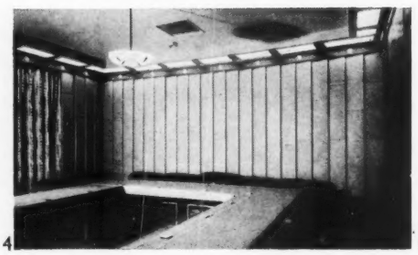
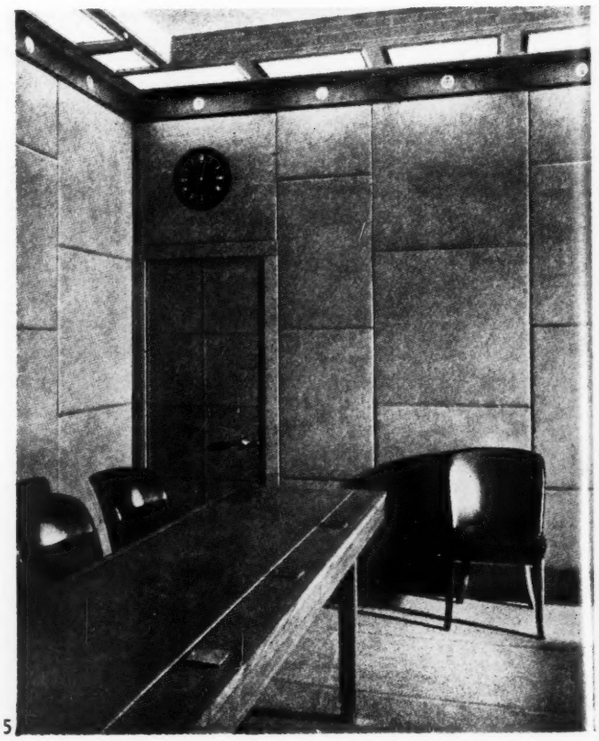
·7
·6
·5
·4
·3
·2
·1
0
C2 C3 C4 C5 C6 C7
128 256 512 1024 2048 4096
FREQUENCY
B.R.S.
2" straw partition board covered with paperhanger's canvas
2" slag wool sheets on battens (N.P.L.)
3" pumice block face rubbed to expose pumice cells
4" acoustic rock wool behind wire net and muslin (Knudsen)
Seaweed quilt 3 ply. scrim covered B.R.S.
Acoustic cane fibre board BB type 15/16 (Sabine)
2" straw partition board B.R.S.
1" asbestos felt fabric painted A.X. finish (Sabine)
7/16" cane fibre board on 4"x2" studs (Sabine)
1/2" wood fibre board on 2"x1" studs at 16" c/c (Sabine)
1/2" double wood fibre board with 1 airspace (B.R.S.)
Eel grass quilt 3 ply. 2 layers 1 1/2 from wall and canvas cover 1" distant (B.R.S.)
1" granulated cork slabs
1" hair felt 1 1/2" from wall (B.R.S.)

3



4

In the use of acoustic materials it is often the method of fixing and the combination of materials which determines their acoustic value. The absorbent walls in 4 are formed of cellulosed leather stretched over felt and plywood, whereas in 5 the felt backing has been omitted and the leather provides an efficient reflecting wall. Both treatments are in the board-room of the Tanners' Federation in St. Thomas Street, London (John Grey, architect).



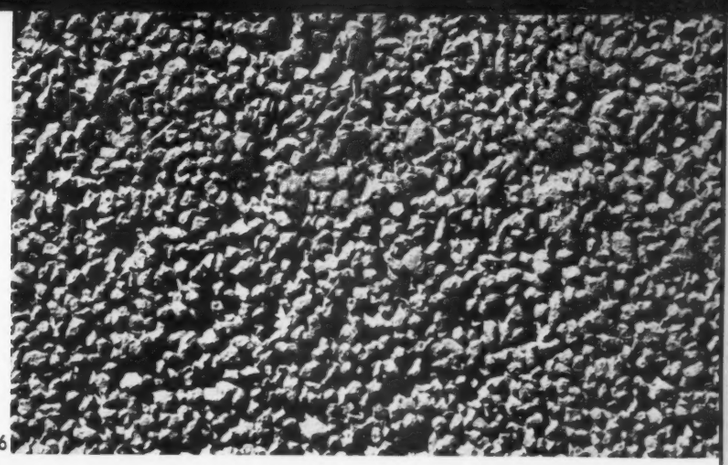
5

DECORATION

8

1. ACOUSTIC STONE

The tendency for acoustic materials to be designed first of all in imitation of traditional materials is exemplified by the case of acoustic stone, 6, which can be bonded in the same manner as natural stone, and in this way may be useful for correcting the acoustics of existing traditional interiors. A method more expressive of its nature as a non weight-carrying material consists of using acoustic stone in the form of tiles, as shown in, 8, the police court of the Cambridge town hall (C. Cowles Voysey, architect). Acoustic pumice blocks, such as 7, however, essentially demand a bonded treatment. They are most effective when the surface is taken off and the cellular aggregate exposed, but laboratory tests show they may also be plastered without any considerable loss of absorbent value.



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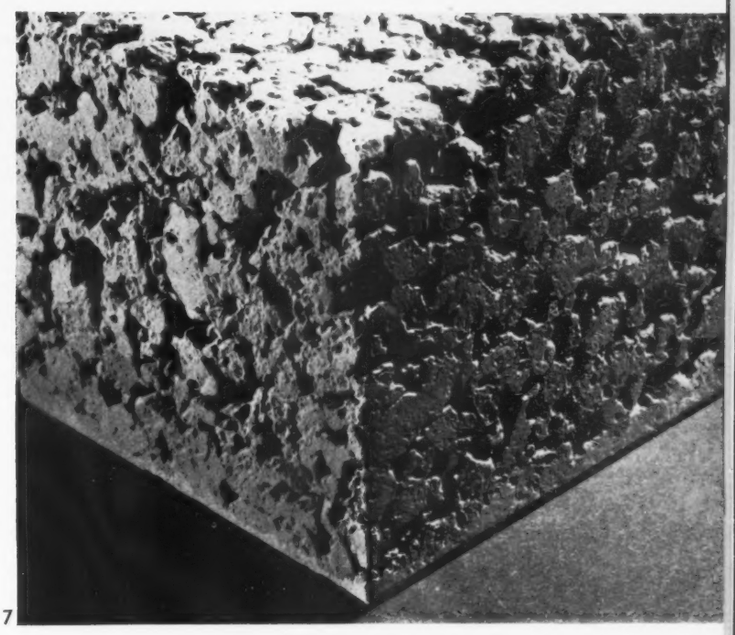

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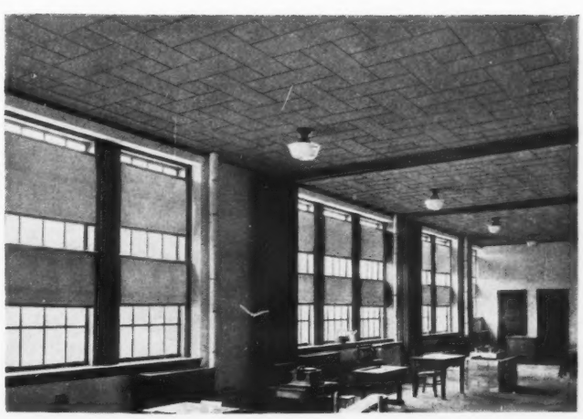
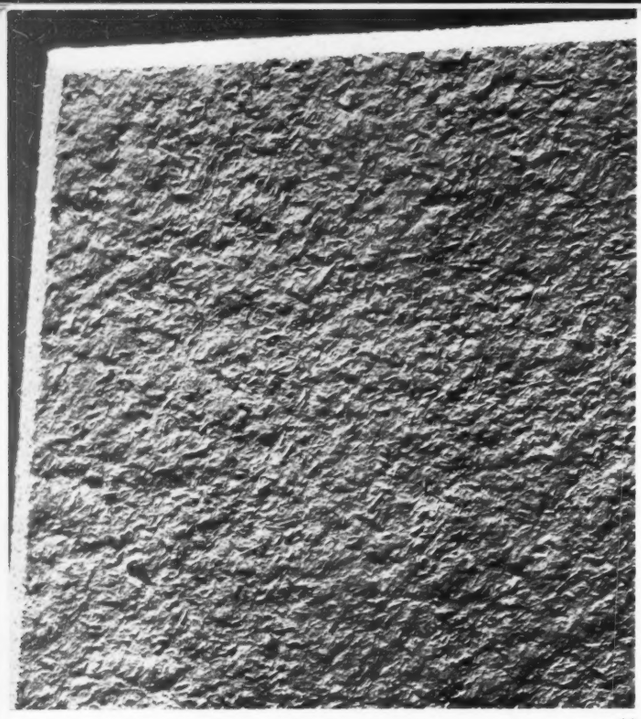


9

Cork slabs, 10, are another material which can be bonded to form special patterns, as in 9, the Kindergarten Room at the Violetville School, Baltimore, Maryland, U.S.A.; or they may be used as rectangular tiles. The slabs are generally manufactured in thicknesses of $\frac{1}{2}$ in., 1 in., and $1\frac{1}{2}$ in., and can be fixed directly to the structural surface by a special waterproof adhesive or nailed to wood furring strips. There are also special mechanical systems of fixing. The slabs may be left a natural colour or painted.

2. CORK SLABS

10



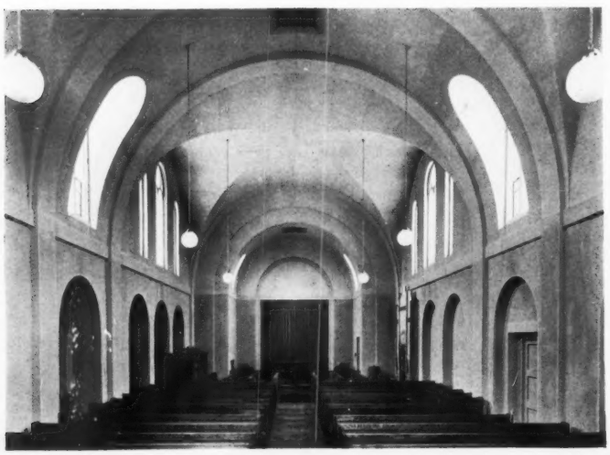
11

3. BUILDING BOARDS

The general sizes for building boards are : Widths, 3 ft., 3 ft. 6 in., and 4ft.: lengths from 6 ft. to 14 ft. The boards can be left untreated or coated with distemper. (A specimen board treated in this way at the University of Toronto showed a coefficient of absorption of 0·35 when untreated and 0·25 when distempered.)

Where the board is being left without applied decoration, fixing should normally be by means of galvanized panel pins, driven at an angle through the board into suitable timber framing. Fixed in this way a certain amount of resonance is provided, which assists good tone production in concert halls, cinemas, conference halls, etc. For broadcasting purposes, however, it is desirable that resonance should be checked by fixing the board with adhesive to a solid backing of cement rendering or plaster, the edges only being pinned to timbers set flush with the wall surface.

A variety of materials may be used for covering joints between adjacent sheets, including strips of board suitably bevelled, or aluminium or stainless steel cover strips ; or the joints can be exposed and the sheets arranged in such a way that a decorative effect is obtained. A simple butt-joint can be used, as in Seamills Church, Bristol, 12, or the edges of the board can be bevelled to provide a V-joint, as in the Conference Hall at Stratford-on-Avon, 14 (Scott, Chesterton and Sheppard, architects), or rounded with rasp and sandpaper. Sheets can be lightly butted together as in the ceiling of the De La Warr Pavilion at Bexhill, 13 (Mendelsohn and Chermayeff, architects), or left with a space between them to provide a recessed joint. This affords decorative possibilities by painting the recess with a colour contrasting with the face of the board, as in the Regional director's office in Broadcasting House, London, 15, (Serge Chermayeff, architect).



12

13

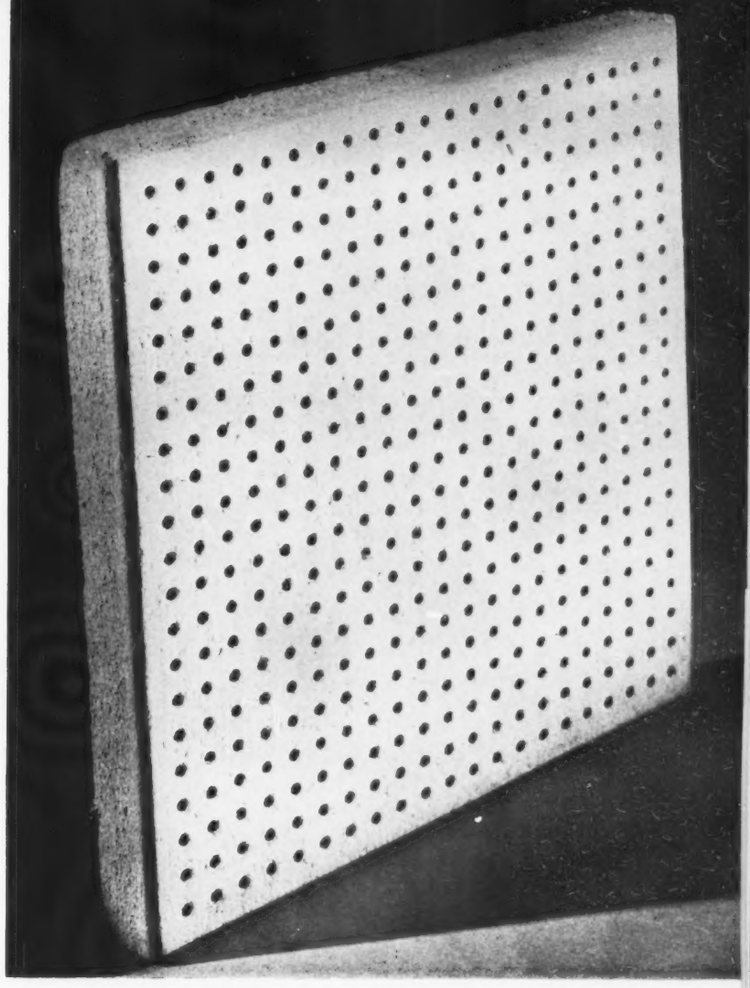
14

15

17

4. FELTED CANE TILES

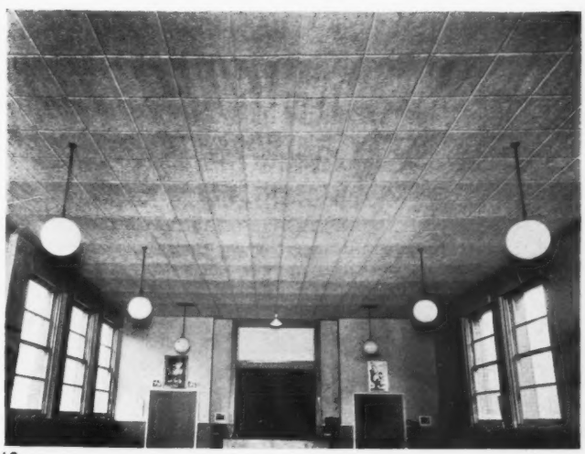
The tiles, 16, are made from perforated felted cane fibres in thicknesses of from $\frac{1}{2}$ in. to $1\frac{1}{2}$ in. and in standard sizes of 6 in. by 12 in., 12 in. by 12 in. and 12 in. by 24 in. They may be nailed direct to wood boarding or furring, suspended by metal furring from suspended ceilings or steel roof decks or cemented and nailed directly to plaster. The surface can be brush or spray painted with any kind of paint without reducing the absorbent value of the tile. 17, shows these tiles applied to the back wall and balcony front in the assembly hall of the Burlington School for Girls at Hammersmith (Sir John Burnet, Tait and Lorne, architects).



16

5. FIBRE TILES

The fibre tiles with bevelled edges, shown in the detail view, 18, are generally 20 in. by 20 in. by 1 in. thick. They are made from wood fibres impregnated and compressed with maquesite cement. 19, shows a ceiling treated with fibre tiles in the City of London School for Boys (Whinney, Son and Austen Hall, architects). The tiles can be laid in mortar or nailed direct to battens, and the surface can be decorated without any considerable loss of absorbent value.



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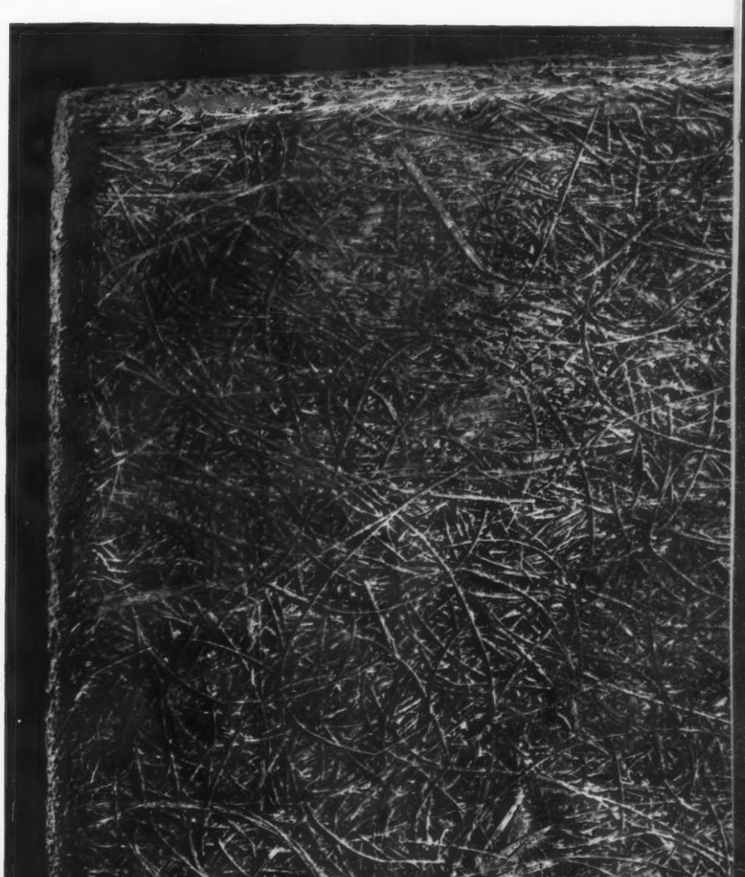

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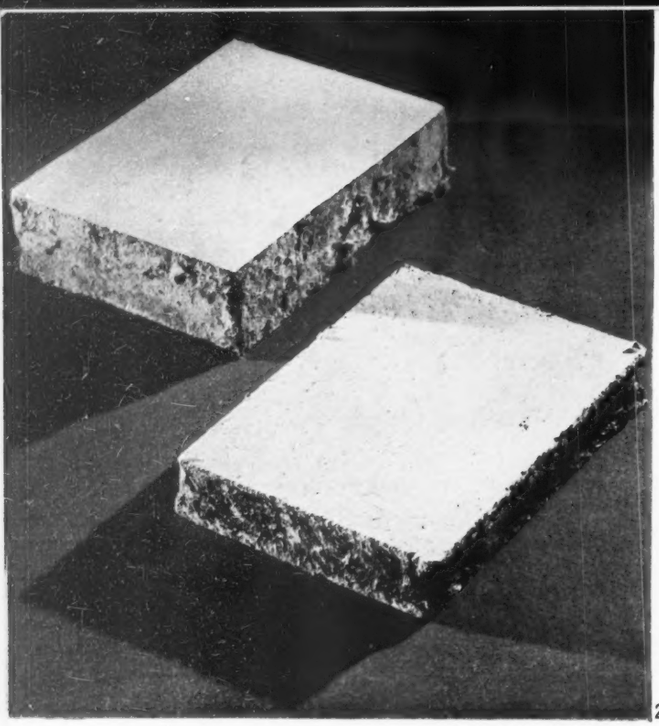
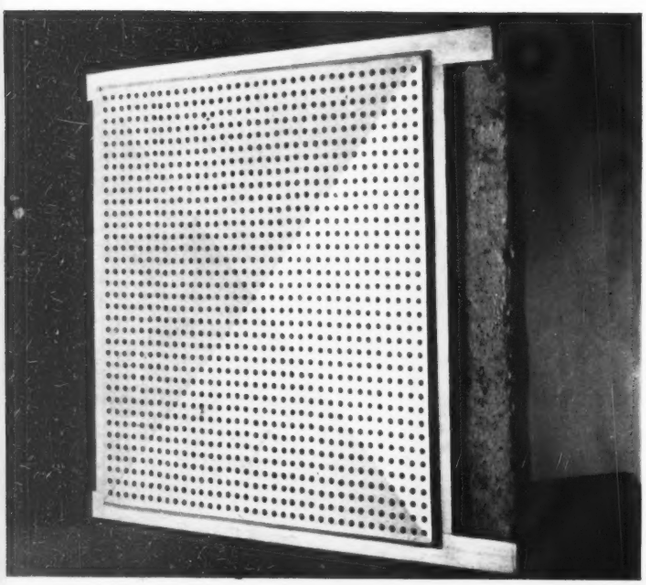


20

6. ASBESTOS PRODUCTS

Various acoustic materials are available which are manufactured from different compounds of asbestos. Two of these are shown in, 20. Above is a special asbestos product with a canvas finish and, below, a sample of acoustic spray with a plaster finish. This spray can be applied to any surface by means of a gun which discharges a stream of asbestos fibre and adhesive, giving a jointless layer of absorbent material of any required thickness. This gives a material that is very flexible in use, as any type of curved or uneven surface can be treated, while the thickness of the material and the degree of hardness of its surface can be controlled to give different absorption efficiencies. The surface can be moulded after application or it can be finished with a water-paint spray without materially affecting its absorbent value. Two coats are advisable, for which the paint should be thinned to about the consistency of milk. The first coat should be sprayed with the gun pointing to the right and travelling from right to left and a second time in the reverse direction, so that all the interstices are properly filled. The second coat is then sprayed directly on to the surface at right angles.



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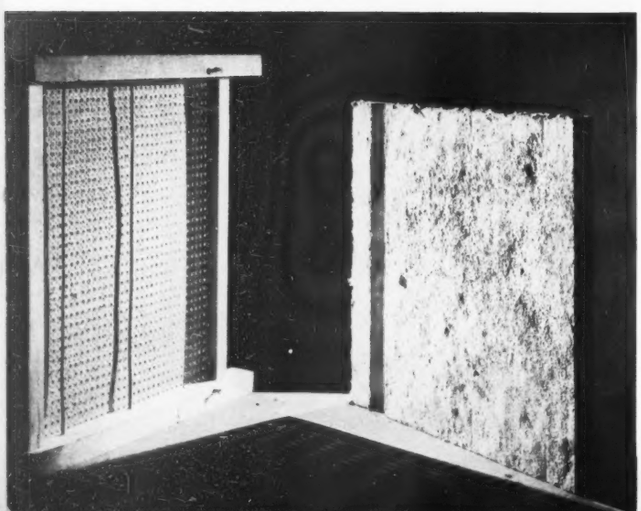

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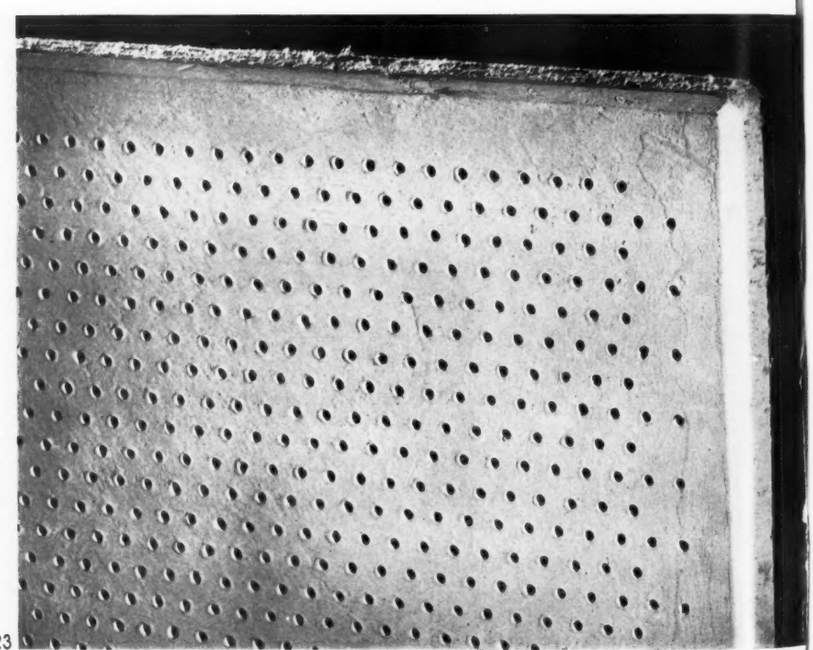
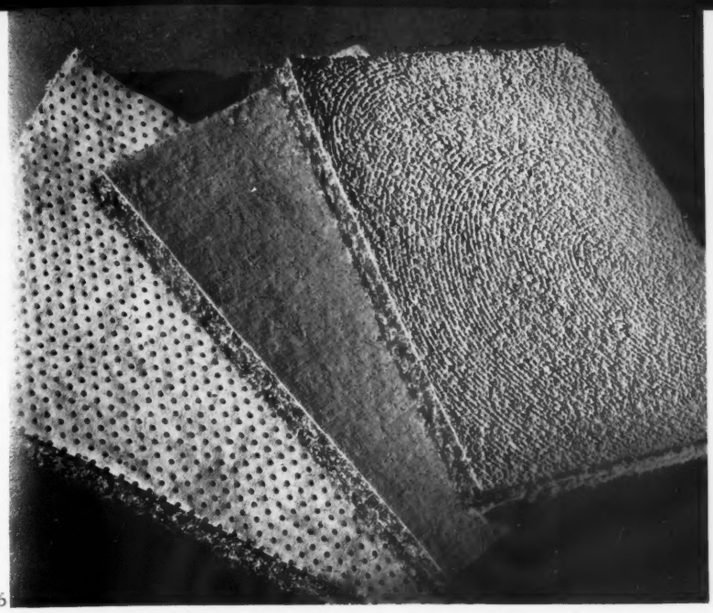


23

8. PLYWOOD- AND PLAS

Patent asbestos products generally have a vulnerable surface, which means that although they can be safely applied in sheet form to ceilings or to other protected areas, some form of surface protection is necessary when they are to be applied to wall surfaces. 21 and 22 show an acoustic tile formed of a patent asbestos material which is protected by a perforated plywood face. A framework of 2 in. by 1 in. battens is first built up between which the absorbent slabs are placed and fixed by means of a special overlapping joint. The plywood covering is then fixed on to the framework and held clear of the absorbent by means of two metal rods fitted at the back of each tile. The sample shows the various finishes which may be applied to the plywood. The surface may be



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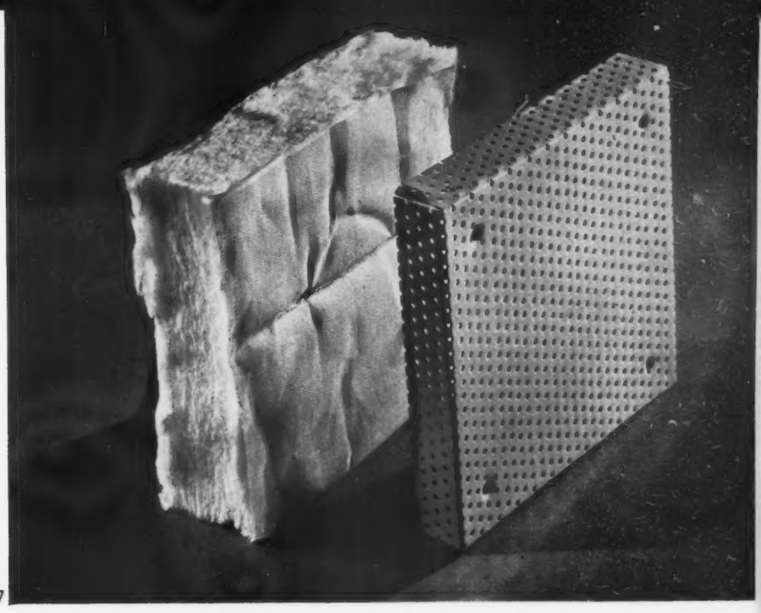
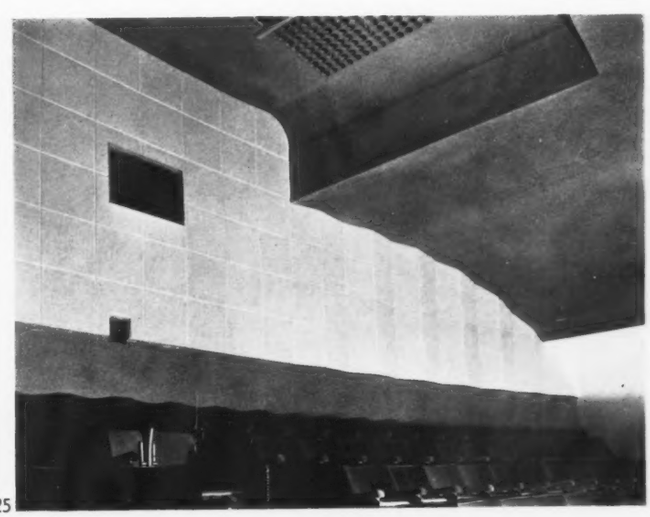


27

7. ACOUSTIC FELTS, QUILTS, BLANKETS, ETC.

These materials are generally obtained in rolls of varying width which can be nailed, screwed or fixed with adhesive direct to the structural surface. Various surface finishes are shown in 26. On the left are two types of perforated canvas finish which are sized to the face of the felt after fixing. In the second example the perforations are made after the canvas is fixed and decorated, so that there shall be no loss of absorbent value owing to the perforations becoming filled in with paint or distemper. The third example shows the same felt with a plastic paint finish. This, however, slightly reduces the absorbent value of the material. For the more vulnerable types of quilt or blanket, such as glass-wool or rock-wool, more reliable protective surfaces are necessary. 27, shows a special type of absorbent consisting of a very delicate type of glass-wool with a muslin finish. The absorbent is protected by means of a perforated metal cover, in this case painted white, which is fixed to the structural framework by means of special fixings in the corners of the protective cover.

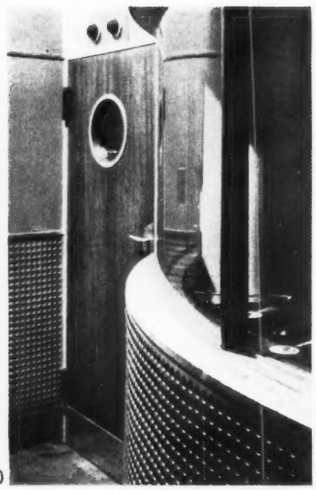
24



25

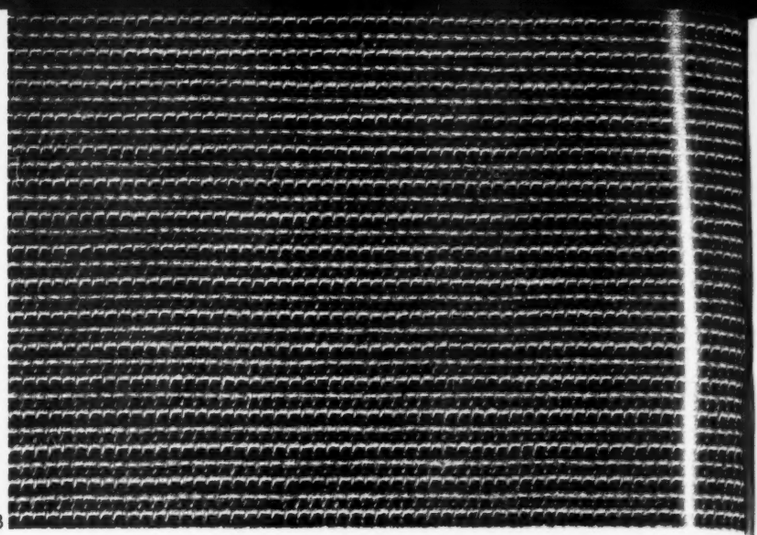
TER-FACED ACOUSTIC TILES

left untreated or decorated with distemper or paint. 23 shows a more common form of acoustic tile consisting of an asbestos absorbent with a perforated plaster face. The plaster-faced acoustic tiles are most of them manufactured in standard sizes of 18 in. by 18 in., and are generally fixed to 3 in. by $\frac{3}{4}$ in. battens by means of special "lost head" nails through a perforation in each corner: or a wood screw can be used and the screw heads "stopped" with any suitable filling to make them invisible. Most of the special plaster finishes can be painted or distempered and they may be subjected to a limited amount of bending, for use on curved surfaces, etc. 24 shows a ceiling treated with these tiles in the "Isobar" Club in Lawn Road Flats, Hampstead (Marcel Breuer and F. R. S. Yorke, architects), and, 25, the gallery wall of the Rex Cinema at Norbury (Harringtons, architects). For the side portions of this wall a special method of fixing has been used, which is designed to increase the acoustic efficiency of the tiles. Alternate vertical courses are splayed at an angle of some 30° to the wall surface so that the limited amount of sound which is not absorbed by the tile is dispersed and not reflected directly back on to the gallery seats.



30

8. PROTECTIVE FINISHES



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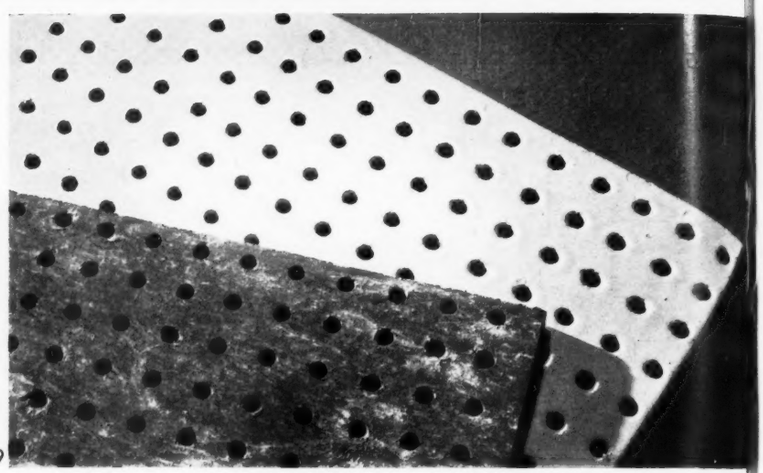
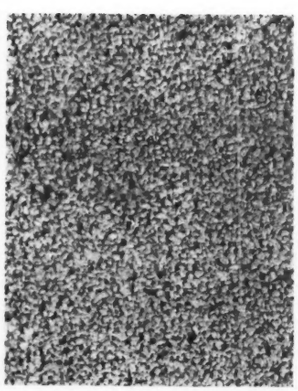


29

Numerous finishes are available for protecting the surfaces of rock-wools, quilts, blankets, etc., such as the acoustic net finish shown in, 28, or the ordinary perforated asbestos slabs, which can be used with their natural surface or painted, as in 29. 30, is another special finish, a perforated rubber covering protecting a rock-wool absorbent, used in the Dramatic Effects studio at Broadcasting House, London (Wells Coates, architect).

9. ACOUSTIC PLASTER



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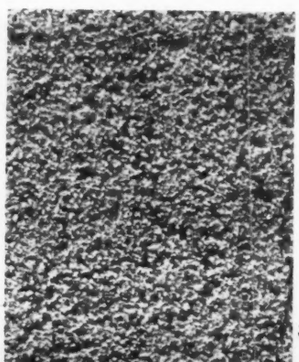

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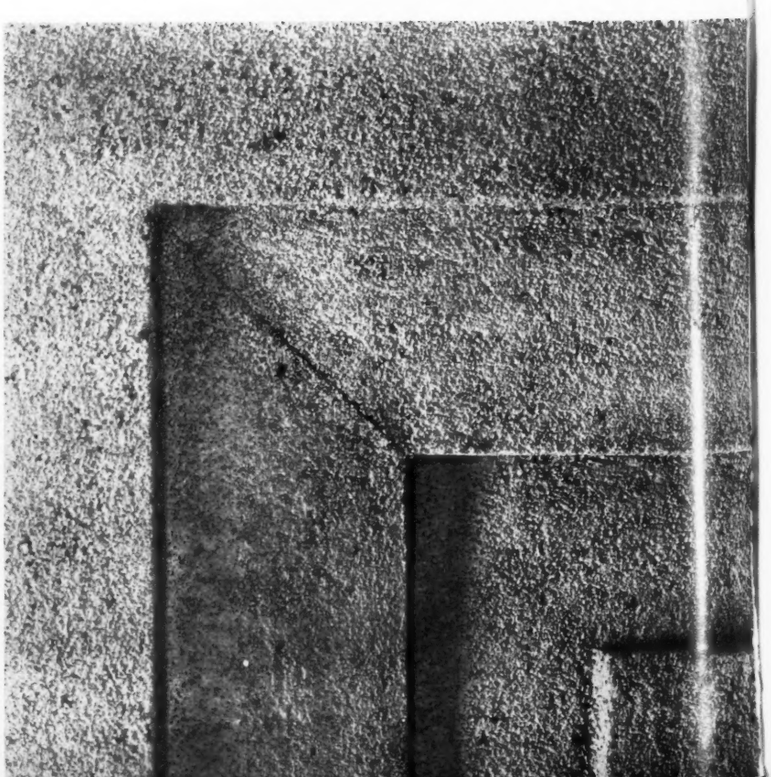


33

As in the case of asbestos spray, a characteristic of acoustic plaster is its flexibility. It can be applied direct to brick, concrete, or plaster surfaces and can also be used on curved or uneven surfaces. There is considerable variety in its surface texture, two typical examples of which are shown in 31 and 32, and there is a similar variety in possible surface tints. Like asbestos spray the plaster can be moulded after application, although mouldings more complicated than those shown in 33, are not advisable. One of its most useful properties is that in correcting the acoustics of an existing interior it can be made to match up very nearly with existing plasterwork.

The Eighteenth Century House

But to return to the houses in the towns, the ground floor is always lived in since it contains the best rooms. The arrangement of an English house is roughly as follows: you enter by a small door over which is a small pediment (the door is never a large one, since there is no need for it), you find yourself first in an entrance hall which is always very clean and more like a room than one of our own vestibules which are always dirty; then you come to the dining-room, which is always large; above the dining-room is the drawing-room, which is always of the same shape and is reached by a spotlessly clean staircase; the hand-rails are of mahogany in beautiful condition; the stairs, like the floors, are made of boards of fir or pine-wood, fitted together as exactly as mosaic work; above the entrance hall is a bedroom and sometimes an apartment or two; the kitchen is always on the ground floor and at the back. It is a general custom in England, which would not be liked in France, to have the dining-room below and the drawing-room above; people find this more convenient for the servants and make no trouble of going up a staircase of twenty steps or so. What I find very inconvenient is the lack of an ante-room or something of the kind, since the dining-room door always leads straight into the hall and the drawing-room door straight on to the staircase, with the result that when they are opened one feels a considerable breeze round one's legs.

I particularly like the doors: they are always smooth and shut firmly; they are generally made of mahogany two inches thick so that the lock can be fitted into the thickness of the wood and is never seen; all that one sees are the brass bolts and the key is always beautifully made. The chairs and tables are also made of mahogany of fine quality and have a brilliant polish like that of finely-tempered steel.

The chimney-pieces are not made like ours with mantel-shelves and panels above, but are always square in shape. The grates are made of iron and are highly polished.

Three houses out of four have a little turret at one end which adds space to the dining-room and drawing-room. The rooms are thus given a very pleasant shape and more light is admitted, since it is possible to put three large windows in the curve of the tower where otherwise there would only have been room for two.

The country houses, known as castles, are usually built of brick. They are huge, but heavy and architecturally not attractive; it is seldom that one sees a handsome elevation. The internal arrangement corresponds in some measure with that which I have described in relation to town houses, for the English do not trouble about the pleasure of making a really satisfactory arrangement of their rooms. In an English house you never see a private door, a private room or a closet.

Francois de La Rochefoucauld

("A Frenchman in England": 1784: *Cambridge University Press*)

A New Note in Bloomsbury

Those whose apprehension has been aroused by rumours that the British Museum intends at some time in the near future to expand into Bedford Square are not likely to find any comfort in the contemplation in the Museum Style 1938, as exemplified in the new North Library. There, on brand new chairs upholstered in emerald green, the students now study the rare manuscripts beneath the shade of vast copper mushrooms sprouting to a height of some ten feet from the centre of the desks, and shedding a discreet radiance on the modernistic iron work, also emerald green, around the galleries.

One had always associated the Museum with subdued and restful, if not always beautiful, surroundings, but now those whose business takes them to the North Library find themselves in a new atmosphere more reminiscent of the foyer of an Odeon.

WHERE THE GARDEN PATH MEETS THE ARTERIAL ROAD

"There are approximately ten thousand architects in Great Britain.

"It would be an error, however, to assume that there are only ten thousand schools of architecture. A brief walk down Regent Street will soon dispel any such illusion.

"Here the traveller staggers past façades of Egypto-Commercial - Renaissance, with glimpses of neo-Tudor up the side-streets. He passes from the shadow of Edwardian Attic in the south to Dietrich Doric in

the north. If his eye is inclined to flinch, he can rest it on cool spaces of business-Byzantine, or on deserts of marble modernism relieved by an occasional oasis of pseudo-Georgian Louis Seize.

"Regent Street is only an example, in miniature, of a process which has transformed London, in the past ten years, into the ugliest capital in the world. This is no longer a matter of opinion. It is a matter of fact. London, admittedly, was always, architecturally, a muddle, but it was a glorious muddle. Today it is a nasty mess.

"This may or may not be a matter of concern to you, on aesthetic grounds. There are many people who are able to live in surroundings of blatant hideousness without noticing them. They can travel down the Strand on the top of a bus without having to shut their eyes. They can walk up Park Lane, even on the brightest day, without contracting a headache from the sight of the monstrosities that line their path. The vulgarity, the meaninglessness of their great city does not affect them.

"But it should affect them. For architecture, more than any other art, is the touchstone of a nation's spirit. This, again, is not a matter of opinion, but a matter of fact. And in view of this fact, the spirit of England is sick indeed.

"A nation's architecture is even more valuable, as evidence for the historian, than a nation's literature. The philosophy of Plato, the plays of Aeschylus, the method of Aristotle . . . these we have with us in their entirety. But though they give us a whole world, in which we can live and dream and have our being, they do not tell us as much as the broken columns of the Acropolis. These have the simplicity of flowers blooming in a desert. They stand out, white and flawless, against a backcloth of barbarism. And though their carven petals may fall in dust about them, as long as a single stem remains, we have before us a triumphant tribute to the glory that was Greece.

"'Beauty', as Oscar Wilde said, in one of those arrowed epigrams that pierced more deeply into the heart of truth than he either knew or cared, 'beauty is the highest form of genius, because it needs no explanation'.

Say that to yourself in the middle of the Strand. And then, if you dare, look about you. I think you will find that the Strand needs a good deal of explanation. Some of us wish that it could be explained away altogether. . .

"Far be it from me to decry the National Trust. Frequently in the clamour of modern destruction, its thin, piping cry of 'Hands off!' has been heard. Sometimes, when no really big business is affected, its cry has actually been heeded. Of course, it is not allowed to interfere too much. *All the same it tries very hard.*

"Opening its 1937 *report at random, we find items such as this :—*

"'Bodiam Castle. Negotiations, as yet unfruitful, have been made for the purchase of some marshland close to the Castle'.

"'A new punt has been bought for the moat'.

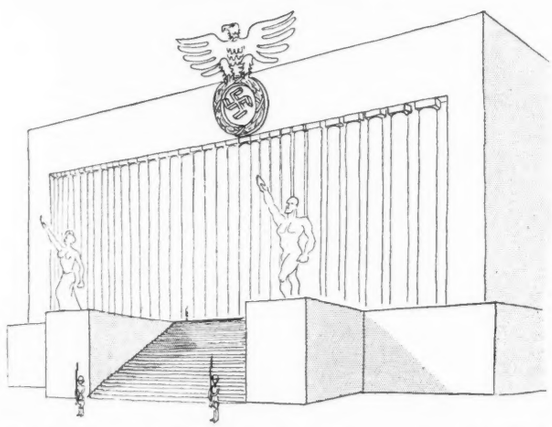
Two pages further on we discover with regard to that lovely piece of England, Coombe Hill, that . . .

"'Repairs have been effected to the hedges, and another litter basket has been provided'.

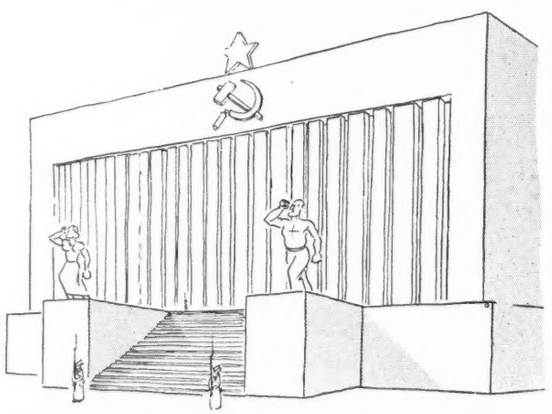
"And before we have time to register our appreciation of the litter basket, we are

A New Architectural Glossary

ITEMS FROM A BADLY NEEDED ATTEMPT TO ACHIEVE A CO-ORDINATED ARCHITECTURAL TERMINOLOGY, WITH ILLUSTRATIONS BY OSBERT LANCASTER.



THIRD EMPIRE. ***A style of impressive simplicity evolved to answer the needs of the Totalitarian State. The great size expresses the energy of a newly liberated Aryan people. In the treatment of the pillar the capital has been retained, albeit considerably modified in form, for ideological reasons. The perfect expression of the will of one sole leader as opposed to that of a Marxist democracy.***



THIRD INTERNATIONAL. ***A style of impressive simplicity evolved to answer the needs of the Socialist State. The great size expresses the vastness of the proletarian masses. In the treatment of the pillar the Capital has been abandoned for ideological reasons. The perfect expression of the community as opposed to the individual.***

enchanted with the further information that . . .

" 'Members of the Committee met on the property to cut back the undergrowth round the seats.'

"This is indeed gratifying. The members of the various committees, according to this Report, include the Most Honourable the Marquess of Zetland, the Viscount Esher, Professor G. M. Trevelyan, Professor Julian Huxley, the Right Honourable the Viscount Ullswater, etc., etc. Whether these distinguished persons all gathered together 'to cut back the undergrowth round the seats' is not entirely clear to me. The Report leaves it in a haze of fascinating mystery. But it is pleasant to try to peer through that haze, and see, as in a dream, the bent figures of marquesses, viscounts, historians and scientists laboriously removing nettles from under the benches in the park. A most elevating lesson in democracy. . . .

" Not long ago, I was in Lincoln. I climbed the steep hill to the cathedral. It is one of the loveliest buildings in our country, not only in its intrinsic detail, but in its situation standing so proudly against the sky as a perpetual monument to a faith we are forgetting.

" I wandered all over the cathedral, and came out feeling a better man. I walked through the courtyard, under the great Gothic gate, out into a little Georgian square. Here I turned, to take a last look.

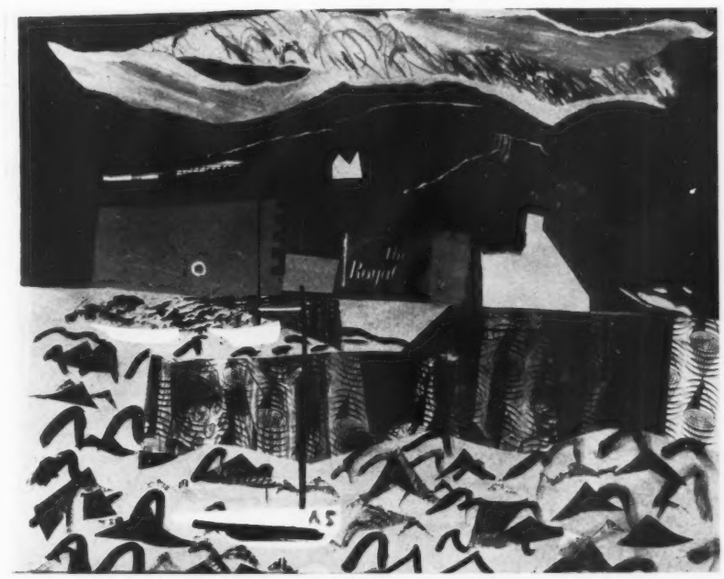
"And as I did so, a notice caught my eye. It hung on a building opposite me. It read . . .

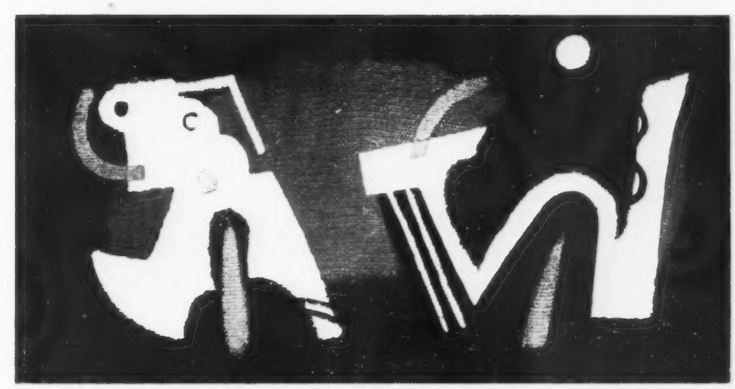
THIS DESIRABLE FREEHOLD
SITE FOR SALE
SUITABLE FOR THE ERECTION
OF A CINEMA, ETC.

" I have been quite angry enough in this chapter without becoming any angrier. The facts speak for themselves. The building on which this notice was hanging was exactly opposite the gate of one of the most hallowed shrines of England. At the most, it was fifty yards from that gate. Immediately behind it was the historic wall of Lincoln Castle. And this was the site on which, presumably, we shall shortly see gigantic representations of Miss Mae West.

"The only thing I need add to those facts is a brief personal note. As soon as I saw that notice I wrote as

LONDON GALLERY EXHIBITION





The second exhibition to be held at the newly constituted London Gallery in Cork Street, which is now under the direction of the distinguished Belgian authority on modern art, Mr. R. H. Messens, will show the recent work of Mr. John Piper. The exhibition will open on May 3rd, and will contain, besides abstract oil paintings in the style that Mr. Piper has shown at a number of recent art exhibitions, a number of " collages " of a kind that he has not exhibited recently. These, mostly landscape and beach scenes, are remarkable for having been executed on the spot. One is reproduced above (upper picture) and represents Aberayron Harbour, on the Welsh Coast. The lower picture is an oil painting entitled " Two Figures."

violent an article as I could write without infringing the laws of libel and published it in a newspaper which has a circulation of nearly a million. Not one reader wrote in to express either his agreement or even his interest.

"*In the same paper was published a short paragraph announcing the death of my dog. I was snowed under with letters of condolence from all parts of Great Britain. The letters were very welcome. But . . . well . . . I have said enough.*"

BEVERLEY NICHOLS
"News of England"
(*Jonathan Cape*).

Art and the Public House

"If the Public House is to continue to be of social service and to retain its humanizing influence as a community centre and a place of entertainment, it must do more than move with the times; it must anticipate popular requirements and forecast trends of opinion and taste. . . ."

These words from the catalogue of an exhibition of "Art and the Public House," organized by Messrs. Whitbread at the New Burlington Galleries, could be taken as the text for what might be called the "Improved Public House Movement"—the reconstruction and improvement of old public houses and the construction of new buildings through which an increasing number of breweries are attempting to provide reasonably congenial surroundings for the large public which necessarily finds its recreational centre in the Public House. How much has already been achieved in providing a healthier standard in Public House design could be seen at the exhibition, the main section of which was composed of photographs and architects' drawings of new and reconstructed Public Houses, while the impression that they will continue to "anticipate popular requirements" was borne out by the many admirable suggestions put forward at the inaugural lunch, in particular for the provision of small libraries in road-side houses in place of the perennial out-of-date weeklies, and, above all, for improved standards of cooking.

Less fortunate are the breweries attempts to improve the standard of "art," in the wider sense of the word.

The commissioning of a number of Royal Academicians to paint new inn signs is certainly a good beginning, but surely the academic painter is the last to be expected to "forecast trends of opinion and taste." The painting of inn signs and the general decorative work involved in designing Public Houses does on the other hand offer an extremely promising field for those painters and decorators who have discarded academic traditions in favour of the less representational design with which we have become familiar in the best contemporary "Commercial" art. How much more effective this type of advertising could be is indicated by some of the literature distributed by Messrs. Whitbread, a particularly good example of which is the brochure "In a Kentish Hopfield," an illustration from which is reproduced on this page.

An illustration from the brochure, "In a Kentish Hopfield," distributed by Messrs. Whitbread, and referred to in a note on this page.

A Victorian Plant House

The description below of the plant house illustrated on page 249 of this issue is taken from Loudon's "Encylopedia of Villa, Farm and Cottage Architecture." In it he describes a building which might, but for its early disappearance, have become one of the classic examples of early Victorian glass house design.

"*As an Example of detached Conservatories not architectural, we shall give the glass dome erected in* 1827, *for Mrs. Beaumont, at Bretton Hall, Yorkshire. This structure . . . was constructed entirely of cast and wrought iron; all the perpendicular supports being of the former, and all the sash-bar composing the ribs of the roof of the latter, material. It was ventilated by horizontal shutters in a low upright wall, or rather iron screen; by upright windows, which opened inwardly at the base of the upper dome; and by a skylight which was raised by weights under the terminating gilt coronet. It was heated by steam from a boiler placed in a house at some distance from it, the tubes being conducted under the floors of the paths. The cost of the ironwork alone was between* £3,000 *and* £4,000. *It is worthy of remark, that there were no rafters or principal ribs for strengthening the roof besides the common wrought-iron sash-bar, which is two inches deep, and half an inch thick in the thickest part, and weighs only about one pound to the lineal foot. The upper dome had an independent support from cast-iron pillars. When the ironwork was put up, before it was glazed, the slightest wind put the whole of it in motion from the base to the summit; and so much alarm did this create in the party for whom it was to be put up, or their agents, that the contractors for the work, Messrs. W. and D. Bailey, of Holborn, London, were obliged to covenant to keep it in repair for a certain number of years. As soon as the glass was put in, however, it was found to become perfectly firm and strong, nor did the slightest accident, from any cause, happen to it, from the time it was completed, in* 1827, *till, on the death of Mrs. Beaumont in* 1832, *it was sold by auction, and taken down. It brought only about* £560, *though it is believed to have cost in all upwards of* £14,000."

Garden Illustrations

The photographs of a modern Japanese garden reproduced on page 247 are lent by Mr. Raymond McGrath from his book "The Twentieth Century House." The two plans on page 245 are from "A History of Garden Art" by Marie Louise Gotheim and are reproduced by kind permission of the publishers, Messrs. J. M. Dent & Son. The photograph of a garden at Kyoto on page 246 and the photograph of the garden at Warsaw on page 247 are kindly lent by "The Studio."

Reigate

Acknowledgment and thanks are due to Mr. Morris Hooper, architect, of Reigate for considerable assistance in collecting historical information about the town, and to Mr. Geoffrey Speyer for the use of his photographs of some Reigate buildings that are now demolished.

HAVE you noticed that in a quiet wood the breaking of a twig seems noisy? It is the same in the case of a quiet neighbourhood—a slight noise seems loud.
Sound Insulation under these conditions is a difficult problem.

Let NEWALLS INSULATION COMPANY

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Solve your SOUND INSULATION and NOISE REDUCTION PROBLEMS

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Trade News and Reviews

By BRIAN GRANT

The Ideal Home Exhibition, Olympia

The opening day of the Exhibition coinciding with the press day for these notes I am unable to give more than a hastily formed impression of this year's Olympian scene. I am loath to let it pass without comment because it is always a good Exhibition—quite the best of the large scale exhibitions held in this country—and annually contains one or more features of some immediate interest to architects.

Attractions numbers one and two this year are, according to the catalogue, THE CITY OF GLASS and THE GLASS HOUSE—the latter interested me, the former disappointed me a lot. Glass is such a favourite material of mine and so very decorative in its many and varied forms that I had looked forward to a more intriguing and crystalline setting for the exhibits in the Grand Hall.

• • •

The Glass House

The Glass House will most certainly prove to be the major attraction. Its designers, Miss N. H. Cuthbertson and D. W. Notley (two R.I.B.A. students) have done a good job of work—their design certainly possesses great merit in its simple structural character and its practical application of glass as the main material for its walls and decoration. Lenscrete Ltd. were entrusted with the glass and concrete construction and the general supervision of the structure. The metal casement contract was carried out by Williams and Williams, Ltd. This included special doors, screens and ventilators in addition to standard casements. What it has cost to build I hesitate to conjecture; certainly high up in the four figure mark.

Inside, the illuminated glass and steel staircase made by J. Starkie Gardner, Ltd. is a lively piece of design and craftsmanship.

An ingenious exhibition piece is the all glass "Ascot" gas water heater constructed in moulded armour-plate glass through which can be seen the working parts and the flow of the water.

The furnishing of the house was unfortunately uninspired and seemed to me to be altogether unrelated to the architectural treatment of the interior; it is a pity that the house designers were not allowed to have a hand in the supervision of this all-important part of the interior decoration.

• • •

The "Ascot" Stand

Of the individual stands in other parts of the exhibition full marks must be given to Rodney Thomas for the design of the "Ascot" stand. The display of the various heater models was intelligently and attractively arranged and in addition, a most welcome addition, the stand incorporated a gay and comfortable tea bar, where Russian, China and Indian tea was served to you by most delectable feminine representatives of the appropriate nationalities. The duration of the Exhibition will, I am bound, cost the hospitable "Ascot" folk a pretty penny in *tea leaves*.

• • •

The Furnishing Section

The general arrangement of the furnishing display in the National Hall does credit to Ian Jephcott. I had not time to examine individual stands, but the general décor of this section of the Exhibition had that uniformity and colour harmony so seldom to be found in Exhibitions in this country.

The Gardens

The gardens, as always, were a credit to all those participating in the display; I particularly liked the simple rock and water garden designed and constructed by Granville Ellis and an amazing show of flowers was contained in the exhibit arranged by Carters Ltd.

• • •

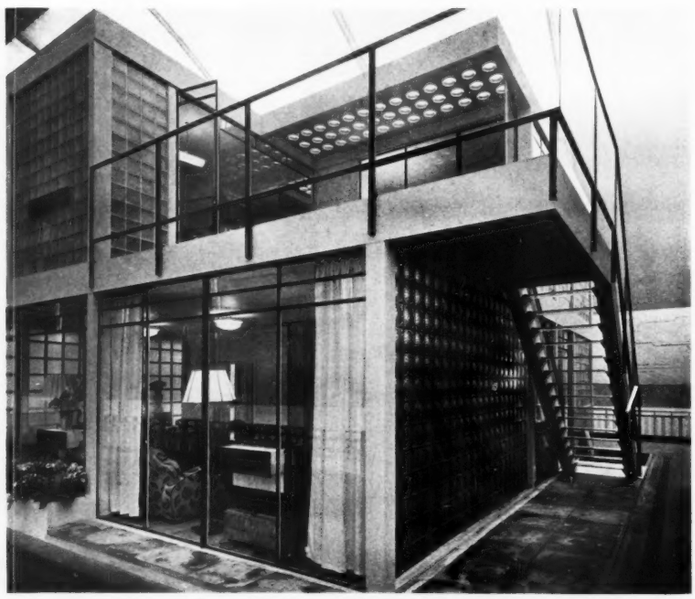
Art Thermolux

Ordinary *Thermolux* glass is extremely pleasant to look upon; it had, however, acquired its good looks by accident rather than by design and until recently its manufacturers have emphasised only its efficiency as a thermal insulating and light diffusing material.

Now we are given *Art Thermolux*—functional and decorative.

• • •

Thermolux, as most readers of THE ARCHITECTURAL REVIEW will know, consists of a spun glass interlayer hermetically sealed between two sheets of glass. The glass silk interlayer is normally white; in *Art Thermolux* colour is introduced and patterns and pictures can be built up at will. The design is apparent from both sides. Under direct

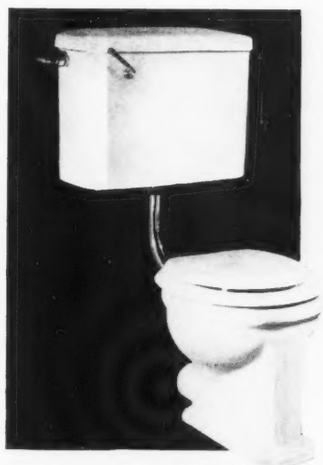


The "Glass House" at the "Ideal Home Exhibition" at Olympia. The house owes its origin to a competition organized by the "Daily Mail" in conjunction with the British Glass Industry, and conducted by the Board of the Building Centre. The architects were Miss N. H. Cuthbertson and D. W. Notley.

Here's a big point in favour of IDEAL VITREOUS CHINA

Ideal Vitreous China, unlike this piece broken from ordinary sanitary ware, cannot craze. Being non-porous it is absolutely impervious to moisture, and will therefore always remain sanitary.

and here are others . . .



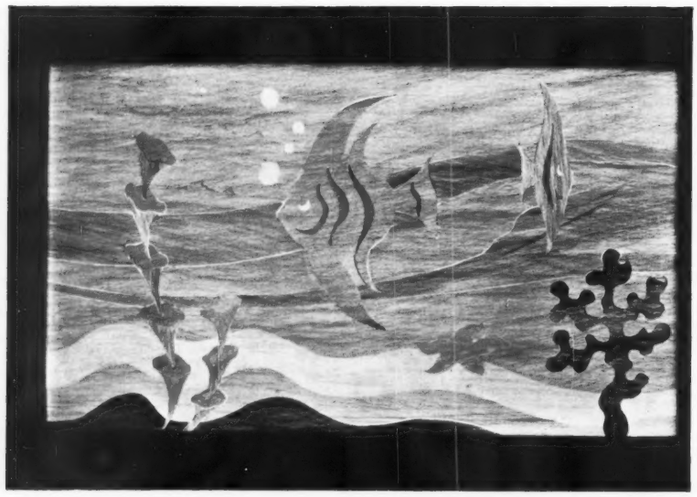
DURABILITY—The gleaming surface conceals a body strong and durable—strong enough to withstand the roughest use. These qualities make Ideal Vitreous China suitable for *all* installations *especially for hotels and public buildings where durability is so essential.*

PRACTICAL DESIGN—Each piece, although of new beauty to harmonise with modern bathroom decoration, *is of practical design.* Here are a few of the many features—all basins have anti-splash rims—the wastes are chamfered to fit flush—well-drained soap sinkings are standard.

There is a great variety of design in which Ideal Vitreous China can be supplied, to suit all styles of modern bathroom decoration.

Write for illustrated list S.18 and further information.

IDEAL BOILERS & RADIATORS LIMITED, IDEAL WORKS, HULL



An example of the new "Art Thermolux." A window design carried out in blue, red, yellow and green glass.

light, with the light source in front of the panel, the effect is lively and scintillant and varies with the view point as the minute facets of vari-coloured glass silk pick up the light; seen from the reverse side, with light transmitted, the panel is evenly lighted and the translucency of the colours gives an effect very like stained glass minus the lead work.

Art Thermolux provides a permanent form of decoration; the colours will not fade and the panels are sealed to prevent any disturbance of the interlayer and to exclude moisture and dust. Both surfaces are perfectly smooth and require no more attention than ordinary window glass.

● ● ●

Messrs. James Clark & Son, always in the van of progress where glass is concerned, have just given an *Art Thermolux* exhibition at their showrooms as an indication of some of the uses to which this new decorative medium will be put. The range of possibility is wide; it is not, by the way, without its disturbing element — *Art Thermolux* insensitively handled might lead to quite distressing vulgarities. I have in mind another form of decorative glass introduced during the past five or six years, which during the past year or so has been seized upon and used excessively badly by the cheapest and most gaudy section of the shopfitting trade. I would suggest that manufacturers would be well advised, in their own interests, to offer the sternest possible resistance to the abuse of their materials. A year of hectic activity supplying, shall we say, the Fish and Chip industry with signs and shop transoms of the "Glorious sunset" variety is good business for exactly twelve months. At the end of that time the good gentlemen in the fish trade will be on the look out for some new glamorous material with which to embellish their premises; and the more sensitive folk, prospective customers at one time, will find themselves unable to use a material that "really does seem to

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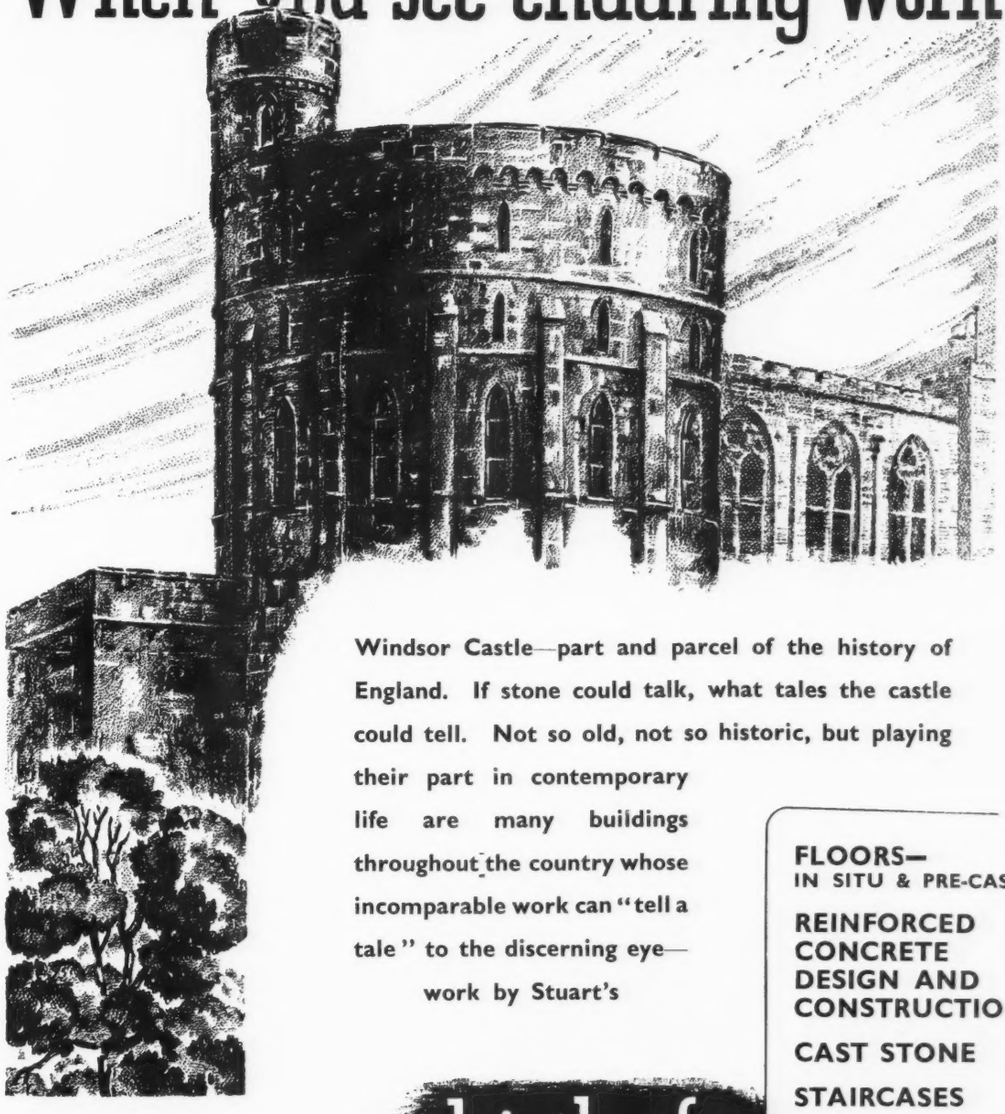

Windsor Castle—part and parcel of the history of England. If stone could talk, what tales the castle could tell. Not so old, not so historic, but playing their part in contemporary life are many buildings throughout the country whose incomparable work can "tell a tale" to the discerning eye—

work by Stuart's

FLOORS—
IN SITU & PRE-CAST

REINFORCED CONCRETE DESIGN AND CONSTRUCTION

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★ **BIRMINGHAM**
Northcote Road, Stechford
Telephone: Stechford 2366

smell of fish." Don't imagine from all this that I object to "Fish and Chip" shops, I do not; but I do dislike their form of "art" and interior decoration.

• • •

The *Art Thermolux* panels at the James Clark exhibition included designs for such varied purposes as (1) a church window, (2) an inn sign and (3) a milk bar; they demonstrated how screens and partitions in hotels, theatres and private houses may be appropriately and very pleasantly treated with mural designs, and for lighting units and built-in or cornice lighting the panels do provide a most excellent and decorative light-diffusing medium.

The manufacturers are The Thermolux Glass Company, Ltd., of 1, Albemarle Street, Piccadilly, London, W.1.

• • •

Crittall Casements

Occasionally from amidst the welter of propaganda booklets, catalogues, etc., that tumble with incessant regularity through the architect's letter box we find something really worth while; in recent weeks I have received two "efforts" that merit and will be rewarded with preservation. The latest Crittall Casement catalogue is an excellent example of useful information intelligently presented. The catalogue confines itself to technical information rather than the illustration of the finished Crittall product and is most acceptable as a well printed and conveniently sectionized reference work on current metal casement practice. Full size section details of all the more usual kinds of purpose-made windows and their fittings are shown; composite windows and special purpose windows (including balance windows, sliding folding windows and double glazed) are adequately dealt with; casement doors (sliding, folding and swing doors) are well described and in each section the more usual and recommended fixing methods are given with accompanying full size details.

Application for copies of this catalogue should be addressed to The Crittall Manufacturing Company, Ltd., 210, High Holborn, W.C.1.

• • •

Home Grown Timber

From John Sadd of Maldon in Essex, comes a pleasantly illustrated little book dealing with the production and use of English hardwoods. The story of production is briefly told and the author has, sensibly, been careful to emphasize all facts relating to timber growing, conversion and seasoning of practical significance to the timber user. The selection of the right wood for the right job is a matter of no little importance and such knowledge as can be imparted by the conscientious timber grower is of more than passing interest to the architect. The article on production is followed by a useful series of notes dealing with the different kinds of timber, setting out the uses that each individual timber is best suited for and explaining why. This is the sort of data that the architect, builder and furniture maker should keep before him. At the end of the book there is a table of comparative costs giving the sizes in which the different timbers are usually available and the price ratio compared with through and through sawn white oak as a basis.

• • •

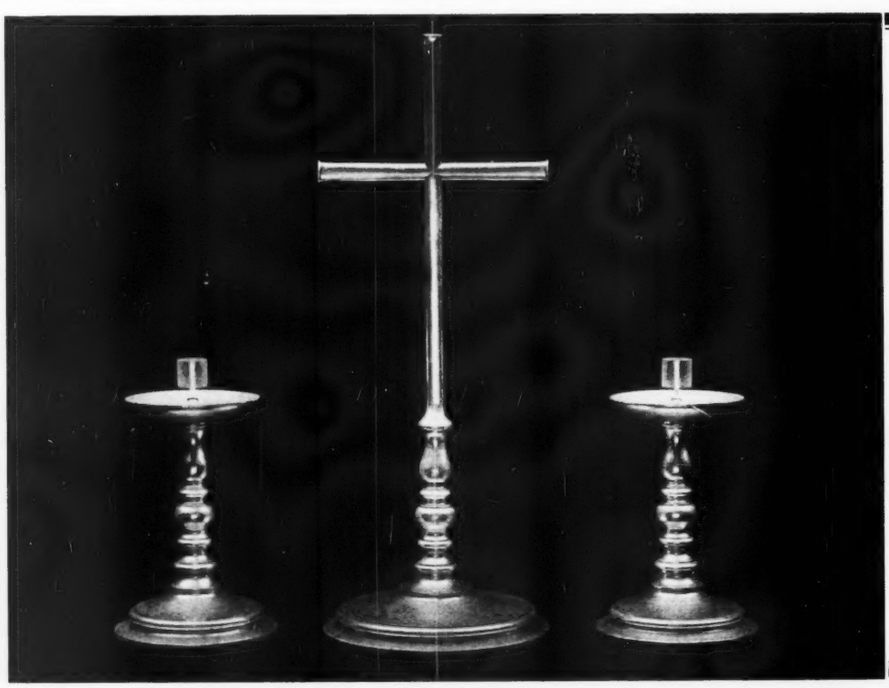
Lamella roofing.

This, we are constantly being reminded, is an age of mass production and standardization. True economy with efficiency can only be effected by the intelligent use of machine-made units. Leaving Art, with a capital "A," out of architecture, the modern architect's work might be described as intelligent and functional planning, and the employment and co-ordination in a practical and æsthetically satisfactory manner of modern materials and the standardized structural units and equipment provided by modern industry.

• • •

Pressed steel units, varied in type and purpose, play a big part in modern building work, both for structure and interior finish.

The *Lamella* System of steel roof construction is the building of an arched roof (or complete semi-cylindrical structure) from standard pressed steel units. The units, which are diamond-shaped,



S. MICHAEL'S HOUSE, ELIZABETH ST., S.W.1

SILVER-PLATED ALTAR SET

Architect: N. F. Cachemaille-Day, F.R.I.B.A.

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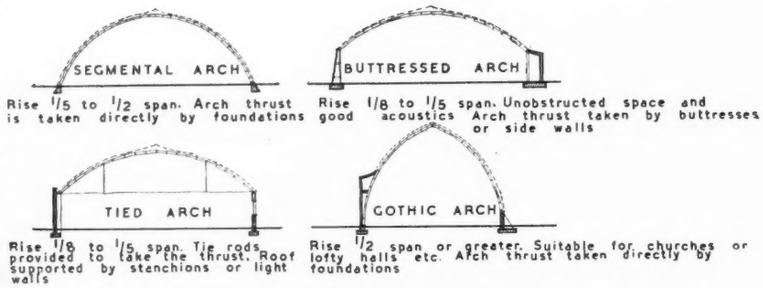

SEGMENTAL ARCH
Rise 1/5 to 1/2 span. Arch thrust is taken directly by foundations
BUTTRESSED ARCH
Rise 1/8 to 1/5 span. Unobstructed space and good acoustics Arch thrust taken by buttresses or side walls
TIED ARCH
Rise 1/8 to 1/5 span. Tie rods provided to take the thrust. Roof supported by stenchions or light walls
GOTHIC ARCH
Rise 1/2 span or greater. Suitable for churches or lofty halls etc. Arch thrust taken directly by foundations

Left, a "Lamella" steel roof in course of construction. The roof is built up of diamond shaped units which consist of four main parts—the "Lamella" bars, top and bottom purlins, and a pair of cover plates for each point of intersection. Above, the four main types of arch in which "Lamella" roof can be constructed.

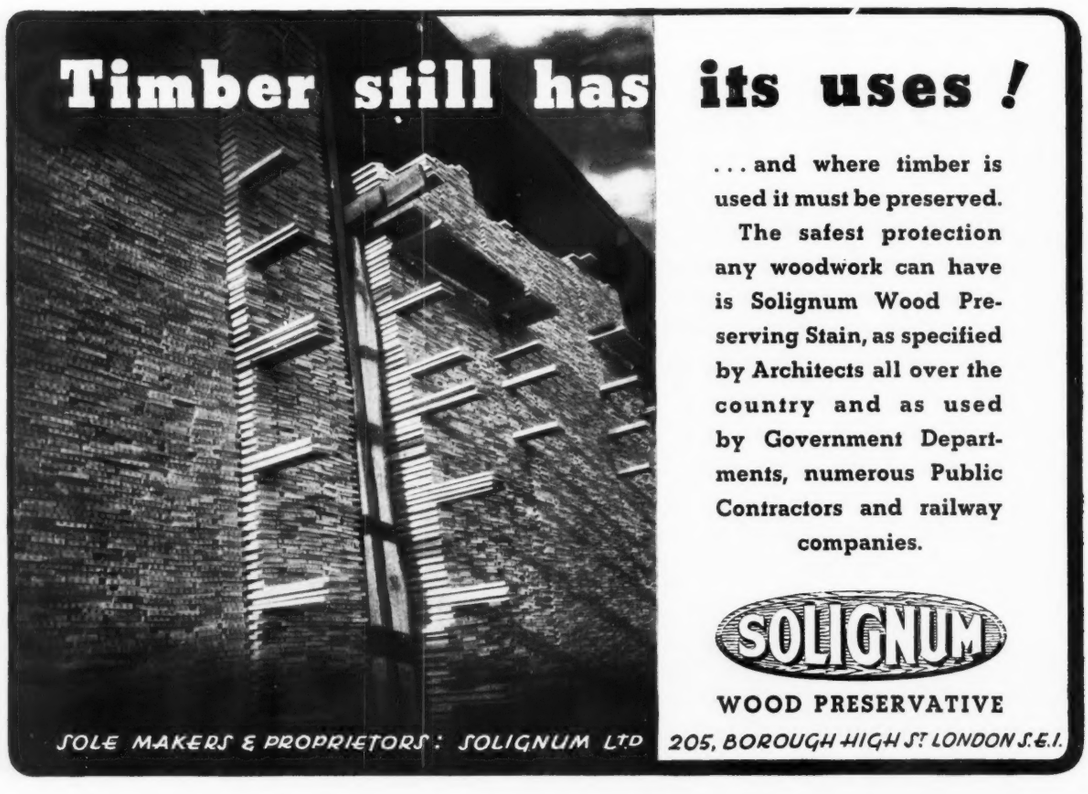
consist of four main parts :—the *Lamella* bars, top and bottom purlins, and a pair of cover plates for each point of intersection. The shape of the *Lamella* bar has been evolved to give the maximum strength as a strut with minimum weight and maximum economy of material; the shape and light weight of the units, too, makes for easy and economical transportation.

The interlocking system in which *Lamella* roofs are built up permits erection without centering, one or two stays only being required, and these only in the final stages of the work when the two sides are approaching completion at the centre of the span. At all stages of the work the portion erected is rigid in itself and practically self-supporting.

Principal types

There are four main types of arch—1. Segmental. 2. Buttressed. 3. Tied. 4. Gothic.

The segmental arch provides the simplest and most economical form of construction with a rise of $\frac{1}{5}$ to $\frac{1}{2}$ span. The arch thrust is taken directly by the foundations. It is used extensively for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. . . and where timber is used it must be preserved.
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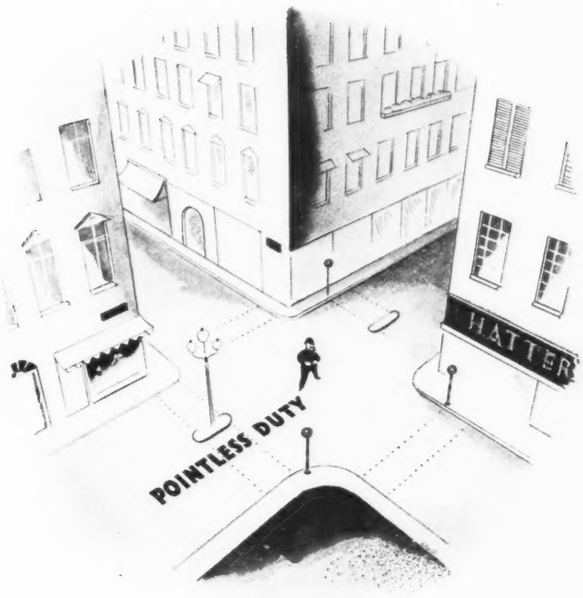
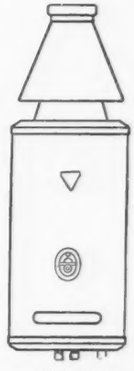


There is no point in doing all the time what only needs doing part of the time. "Ascot" Gas Water Heaters instantaneously heat any required quantity of water and no more. One "Ascot" Multi-Point serves the whole house automatically throughout the 24 hours, saving fuel by keeping the running costs proportionate to requirements. There is no storage, no waste, no work and no waiting. "Ascot" Gas Water Heaters have become the modern Hot Water System in thousands of flats and houses, permitting a reduction of rent to the tenants which more than compensates for the individual running cost.



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Type NEA 32
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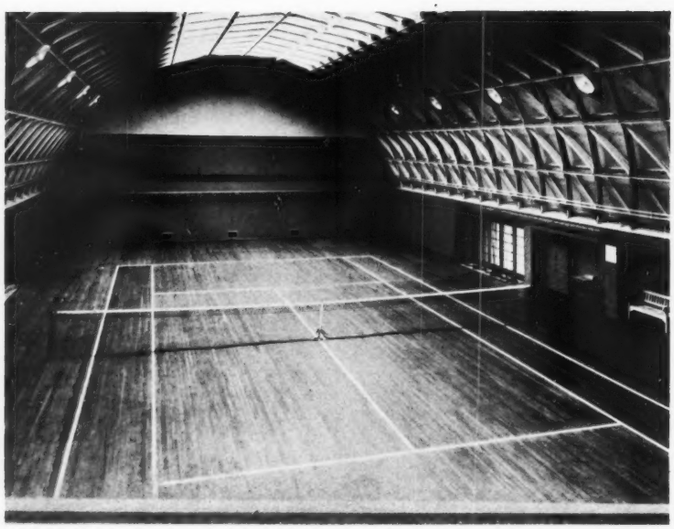


A "Lamella" roof to a Sports Court at Ascot, Surrey, showing the method of lighting. The glazing is run above the structural framework without interrupting the units.

aerodrome hangar construction and for garages.

The buttressed arch is employed where completely unobstructed space is required. The Gothic arch type is used for churches and lofty halls. All forms of *Lamella* construction provide a clear working area with good ventilation (the clear span in each case may be from 30 ft. up to 250 ft.). Natural lighting facilities are adequate as roof lights may be placed over any part of the structure, the glazing being run above without interruption to the units.

• • •

Roof covering

Any normal type of roof covering may be used.

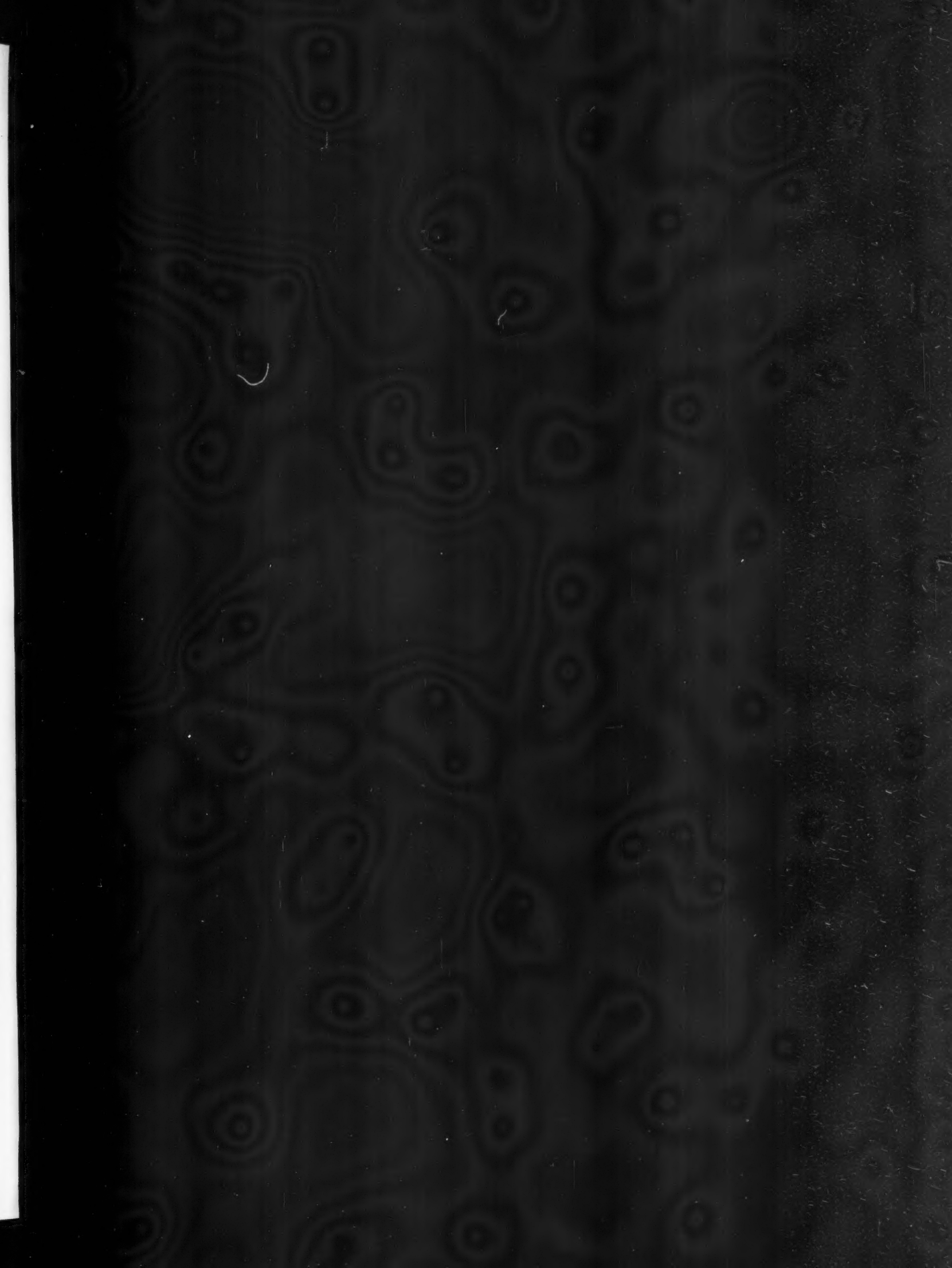
In the case of large sheet materials V-shaped bolts are used for fixing the sheets direct to the upper steel purlin. With other types, wood joists or rafters are used over the purlins.

An important advantage of the system is its adaptability for subsequent extension and reconstruction work and the ease with which it can be dismantled and re-erected; this latter feature makes it a suitable form of construction for temporary structures such as exhibition pavilions.

In appearance it has much to commend it. It has symmetry and an air of unostentatious strength and efficiency. The photographs accompanying these notes show a close-up of a *Lamella* roof in course of erection and the *Lamella* roof to a Sports Court at Ascot in Surrey.

Horseley Bridge & Thomas Piggott, Ltd., the licensees and manufacturers for the British Empire (excluding Canada) will be pleased to send you fullest particulars and photographs of the varied types of *Lamella* construction already erected in this country. Enquiries should be addressed to Horseley Works, Tipton, Staffs., or to their London office at 22, Carlisle Place, S.W.1.

HAMMER'S JOINERY AT DOLLIS HILL SYNAGOGUE

The entire Joinery Work for this Building, including Seating, Doors, Almemah Furniture, Handrailing, etc., was carried out by HAMMERS to the instructions of Sir E. Owen Williams, K.B.E.

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